THE

AMERICAN FARMER:

DEVOTED TO

Agriculture, Horticulture, and Rural Economy.

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"O FORTUNATOS NIMIUM SUA SI BONA NORINT
"AGRICOLAS." . . . . . *Virg.*

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JUNE.

"O, there is blessing in this gentle breeze,
A visitant that, while it fans my cheek,
Doth seem half conscious of the joy it brings
From the green fields, and from yon azure sky."

Editorial Gossip from the Farm.

Good Farmer: Happy in being away from walled up streets and narrow alleys, abroad in the wide fields, and green meadows, I propose to write to you from "out here," in free and easy style, not up, perhaps, to the dignity of the Chair Editorial. But country-men take off their coats to dig and to plough, and why not lay aside dignity, if it be an encumbrance? Why should a farmer, when he makes a note of his doings, be mewed up in a stiff-backed chair, and not rather write from a stump, or the shade of a tree, or perchance, if it suit him, "a sittin on a rail?" Let me then drop the conventional "we," and take leave to be personal and singular; and free of thought, and free of speech, *currente calamo*, I shall, at least, harmonise better with my surroundings, with bees and birds, and gentle breezes and babbling brooks, and all this May day life around me, humming and singing, gay and happy, going freely their own ways, doing busily the work that is set them, very obedient to law, and very careless of opinion, or of admiration.

And now of my work—late work it is—for do you know how during March, it rained and rained—"water, water, everywhere," and up to April 8th, no plough could touch the land. Then we went into the sod ground, and soon, with glorious, drying weather, into the lighter parts of the oat field, breaking well with two mules, and harrowing both ways after sowing the seed. Then into the sod ground again, turning a tough turf full seven inches, and wishing all the while for a subsoiler in the tracks, but too poor. With short occasional delays, we come to the 7th of May, and are ready to plant corn. Ground in fine order, fertilizers at hand, and just ready for a start, when again, such a rain, and such a blow—no corn to be planted for a week to come.

This reminds me of those drains which I ought to have, but have not. The corn-field slopes well, with ample fall, but a close subsoil forbids the sinking of the water; so the soil proper is thoroughly saturated by the rain, which weeps slowly away from it, or is evaporated sooner or later (especially later) by the winds, while the surface is baked into indifferent bricks, and so I have a wet soil, a cold soil, a late soil, and a hard soil to work, all for the want of drains to take the water quickly away. "But why," you ask, "have you not made the drains?" Ah, Old Farmer, why indeed! You give us good advice and wise instruction; you gather up the newest and best ideas that are going around, and tell us of the progress of science, and the improvements in implements and machinery; all very good, and very necessary, but they go not to the matter of making drains, because the first step there is to drain somebody's exchequer, and ours is drained in another direction, and hasn't a fall this way; and you have'nt introduced us to your bank directors, who wont trust country people, at any rate, because their crops don't grow fast enough, and don't mature, like their notes, in sixty, or at the most, ninety days. Or to come closer home, *Old Farmer*, you'll remember, that when the war began you stopped work: you "laid down the

shovel and the hoe." Like Chief Justice Chase, you stood upon your dignity, and would'nt hold court in District No. 1. Indeed any attempt to cross the "lines" to your general field of labour, would have subjected you to arrest for giving "aid and comfort to the enemy." This is only a *sample* of the reasons—their name is legion, all South of Baltimore—why our drains are not made, and the waters loiter here in mischievous idleness, that should be ten miles away, helping the Potomac to keep the Chesapeake agoing.

What's to be done as we wait for the waters to subside? Throw up the manure in the yards in preparation for removing, and haul when we can. Too much water again; make a note of it, and see how this matter can be arranged to give the manure moisture enough to rot, and not enough to drown it, and save, hereafter, the expense of carting surplus water to the fields, where there is already too much,—folly upon folly.

Then, we grind up the grass scythes, for there is pert and forward grass upon the lawns and the headlands, that needs taking down; Orchard grass it is, where it should'nt be. We are not answerable for introducing so coarse a grass, where only the finest should have place; and the cock's-foot is a game old fellow that will not be put out, by any gentle means. If we do no more, we can cut his comb to-day.

There are vacant spaces for evergreens on the lawn which we may take the opportunity of filling up. Why do not our country-ladies have small nurseries of these on their grounds, from which they may plant on all suitable times, and increase a growth which tends to cheer so much the aspect of the winter scenery. Ours are at hand, and to-day we profit by it.

In the garden, Irish potatoes are breaking ground—early Goodrich, Harrison, Peach blow; we will have something to say of them by and by.—Beans are of a golden hue, as well they may be, when the thermometer has been down to 34. The corn is *yellow* corn. The peas are all right; sweet potato plantings ready for the hill; tomatoes not crowded into long, spindling pipe-stems, but growing strong in pots, and ready for the open ground, &c., &c.

Strawberries are in full glory, with richness of leaf, and wealth of bloom, that is rare to see. Hovey, and Triomphe, Jucunda, Wilson, Filmore, Agriculturist, Russel, and what not. What a serious discussion I mean to have with these parties, on the topics of quality and quantity. A committee of Maryland ladies—men are incompetent—must be called on for help, and these matters must be settled without reference to the "Farmer's Club" of the city of New York.

And so of grapes—Delaware, Iona, Israella, Concord, Rogers' Hybrid, Ives' Seedling, Clinton, Harford, Prolific, &c., &c.,—we must try all and hold fast the good: the good to eat, and the good to drink; for, with all deference to our abstinent friends, I reject not that which in this "vale of misery," helps to make a "glad heart," and a "cheerful countenance;" I do not yet understand that a good gift used temperately causes intemperance. With this sentiment we close our first instalment of "Gossip from the Farm."

Farm Work for the Month.

THE CORN FIELD.

The crop of corn must be now an object of especial care. Let the young farmer be warned against the evil of what is technically called "Getting in the grass." Every thing is growing that has the power and the opportunity, and grass especially, in all cultivated lands. A long spell of wet weather, when the grass wont be killed, may give great trouble, so be sure that if such a spell come, there be none that wants killing. When the planting is done, keep cultivators, and as far as necessary, hoes busy, quite up to wheat harvest, when the working should be so well done as to be safely stopped.

THE TOBACCO FIELD.

This is the great month of the tobacco crop. Every hill set by the close of the month will probably ripen well before frost. But to finish by the end, the planting must begin in the early part of the month—which is hardly to be hoped, however, in this untoward season for sowing seed. The earlier in the month the plants are fit, the more sure of planting seasons and prompt growth. Be sure that the ground is in readiness, and if the planting must be late, give the land an extra working before planting.

If the season of planting must be protracted long and late, especial care must be taken of the plant beds, keeping clear of weeds and grass. Use great care in drawing the beds, that the plants be not mashed or bruised, or have the roots much broken, and have enough baskets to avoid the necessity of throwing large heaps into the body of a cart. Give particular attention to having the plants properly assorted in drawing, to secure uniformity in size on the same lot of ground. This is very needful both as to growth and ripening. The careful setting of the plants is very important, and becomes daily more so as

the sun gets more power. Allow no racing or emulation in this work. Some hands can move rapidly and do their work well, and others that would rival them in speed, crowd in, and double up the roots, or leave them with no hold on the ground. In either case they perish, and the ground must be re-planted at great disadvantage.

As soon as the plants show that they have begun to grow, as they will by their centre leaves, weed the hills, by carefully scraping away with the hoe the whole surface from around the young plants, leaving no vestige of weed or grass.

POTATOES.

The longest day in the year is the day to plant the principal crop of potatoes, or about as near that as may be convenient. Good sward land is best, and better if manured on surface last year, making nothing more necessary now, than a little ashes and plaster thrown on the plant as it comes out of the ground. Have ground in readiness, and if it need manuring as is most likely, a good dressing of rotted manure or compost, or long fresh manure if need be, thrown on the sets after they are placed in the drill—or a dressing of super-phosphate, not less than three hundred pounds to the acre, put on in the same way. Cut the potatoes, if large, a week or more before planting, and spread them in a cool place to dry and heal. Let them not be exposed to the hot sun while planting. Open the furrow fresh, *drop and cover immediately*. Potatoes planted in hot, dry weather, often fail to grow for want of these precautions. Beware of seed out of the hold of a vessel.

HAY.

Orchard grass and clover must be cut this month and made into hay. Cut too early, rather than too late, but try to get just the right time. It is said that the bees are good guides in this matter, as they know best when the sugar is developed, and the sweetest hay is to be made. The common sign of fitness for cutting clover is when a portion of the blossoms have turned brown—some say a third, some more. We think that too often the error is committed of beginning too late—when the stems are hard, and the leaves damaged by moisture. It is very desirable to have the clover as free from water as possible when cut. Let it lie but a few hours in the sun; then throw it into cocks where it may finish curing. Before taking it to the barn, throw these open for a few hours, when it may be safely housed. Orchard grass should be mowed when it comes into full bloom.

HUNGARIAN GRASS OR MILLET.

Sow on well prepared and fertilised land, early in the month. It grows rapidly and draws heavily on the soil, and needs therefore plenty of food at command.

FIELD PEAS.

These may still be sown, up to middle of the month.

RUTA BAGA.

Get ground for this crop broken, but it need not be put in before middle of July.

WHEAT HARVEST.

Make early all needful preparation for wheat harvest. Engage hands sufficient for your purposes. Secure at once a good reaper. This is an easy matter among the many in the market, and the price is soon saved in a harvest of any extent. If the cradle must be used, see that you have a good one, in good order.

But, especially, be in readiness, by pressing forward with all other needful works, happy in the pleasant summer weather; for though old Sol makes his most direct advances now, good mother Earth receives him yet awhile with a refreshing coolness.

The Vegetable Garden.

Prepared for the American Farmer, by DANIEL BARKER, Maryland Agricultural College.

JUNE.

Much may be done in every department of horticulture and agriculture by carefully considered, systematic action, so that there shall be no doing and undoing; no twenty weary steps, when five would do; no tugging and toiling at weeds, day after day, with the bush hook, when the dash of a sharp hoe would enable a man to do more in one day than he can accomplish with the bush hook or scythe in a week. We have been led into this train of thought by having been at work endeavoring to root up some briars, &c., which we are gravely informed have had the entire control of the ground they stand upon for several years. Where they were, is of no moment, they are not there now. Question—would it not be well, under such circumstances, for proprietors to cultivate a smaller space, and cultivate it well? We are inclined to believe that, in reference to the garden, a small one, well cultivated, is far more satisfactory than a large one in a neglected state. We know, from years of practical experience, that so long as hope remains, a man can, and will, accomplish a good deal, and surmount many difficulties; but let hope die, and he becomes discouraged, and succumbs to the feeling of the impossible at once.

It may be said, what has all this to do with the management of the garden? As the labor question is now an engrossing one, we answer much —very much, as in our jottings for July we will endeavor to show.

Embrace every opportunity, whenever the ground is sufficiently moist, for thinning out the early sown crops of beets, carrots, parsnips, &c.; and, as it is presumed they are all sown in rows, let the cultivator and hoe be kept at work between the rows, not merely cutting the tops of the weeds, but stirring the ground from two to four inches in depth, which will effectually destroy the weeds, and check rapid evaporation. If former directions for draining, subsoiling, &c., have been carried out in this department, it will now present many agreeable and interesting features. There should now be continual hoeing, forking, spading, &c., going on, which, continued with a favorable season, will tell well upon the various crops, which we hope will be abundant in the garden of every reader of the *Farmer*.

Spading and planting vacant ground should not be neglected whenever required, not omitting to lay on the manure.

Keep all advancing young crops in a growing state, by timely application of water whenever they may require it. Our plan of watering is not to give here a little and there a little, but a good wetting once in four days.

Continue to plant out cabbage, Brussels sprouts, savoy and cauliflowers for fall use.

Prepare trenches for the main crop of celery.

Make sowings of string and pole beans, for succession, and thin out the advancing crops, stirring the soil well about the roots.

Make occasional sowings of the best kinds of summer lettuce.

Continue to sow "champion of England," pea, which has proved with us to be the best to sow the early part of the month, and towards the end we sow for a late crop the "Early Frame," or Dan O'Rouke, after which time there is but little chance of their coming to perfection.

Let tomatoes be well thinned, and kept tied to a trellis.

Thin out turnips, and sow a few early purple-top for succession.

Do not forget the application of liquid manure to the growing crops.

Spinach is an excellent summer vegetable, and should be sown every month from March to September. Whenever spinach begins to run to seed, we never take the trouble to remove it, but merely cut it up and leave it to enrich the ground. For summer use we prefer the round-leaved, and for winter the prickly-seeded.

Potatoes should be frequently cultivated and hoed between until they receive their final moulding up.

Continue to sow and transplant for succession sweet corn, cucumber, melons, eggplant, radishes, lettuce, endive, parsley, tomatoes, &c.

The Fruit Garden.

In the summer management of fruit trees, it will be necessary to look over them carefully and to pinch off or cut out any ill-placed or superfluous shoots, and where there are vacant places, the next strongest shoots should be cut back to three or four eyes, from which shoots will spring and fill out the head during the season. Any shoots infested with insects should be carefully removed, unless much wanted upon the tree, when the insects must be crushed and the shoots well washed, as the remains are about as bad as themselves to the health of the trees.

When the fig trees have made shoots about six inches long, pinch off the points; by which means a more stocky and fruitful growth will be attained than if left to grow.

Strawberries will now be making runners freely, and whatever number is required should be from the strongest only, which should be removed, soon as they have made a few roots, and planted out upon a partially shaded border of rich, light soil. Should the weather be hot and dry, when practicable, the strawberry beds should be thoroughly soaked with water. Many of our friends, who are anxious to grow strawberries, complain that their beds are failures. We think one reason is that the plants have not moisture enough during the time they are in bloom. A good soaking of water in dry weather often makes the difference between a full crop of fine berries and a small crop of poor, insipid ones. Our practice has been, after a good watering, to mulch the plants with short straw or grass, which not only prevents the fruit from being soiled by the storms, but keeps the roots cool and moist.

The hot weather, which is now likely to prevail, will bring out the insect tribe in great abundance; and they must be met with timely remedies. To this end the best thing to do is to subscribe for the *Practical Entomologist*.

Fruit trees, in pots or tubs, will be greatly benefitted by frequent applications of manure, water, and powerful syringings overhead.

Grape vines will need looking over, in order

to keep the young growth tied up to stakes, we do not allow our young vines to produce but one cane, and are careful not to remove the laterals before the latter part of August. Upon the appearance of mildew, we dust the part affected freely with sulphur, give a surface dressing of about a handful of super-phosphate in a radius of about three feet to each young vine, and mulch with straw or half decomposed manure, and during dry weather, a good soaking of manure water or soap suds, about once in ten days, will be of great benefit to them.

The Flower Garden.

Roses should have the garden engine or syringe played upon them frequently, which will drive away the fly as effectually as any method we ever tried, and do the roses much good. Newly made gardens can be planted with roses now as well as at any time during the year. The florists supply good, strong plants, in almost all the classes, in pots, at reasonable rates, and these, planted out with care, in good, well trenched ground, and liberally manured, will grow with vigor and flower well during the fall. We prefer planting roses, upon their own roots, (from pots) in May or June, to any time of the year. Roses, for flowering well in the fall, should now be cut back to about one-third of their new growth. The shoots then cut back will throw out side shoots, and produce fine bloom late in the fall. The rose is a gross feeder, and is much benefitted by liberal application of manure water.

Geraniums, verbenas, and other summer bedding plants will require constant watching and looking over, as under the best management failures will sometimes occur, which should be immediately made good. When display is not immediately required, we pinch all the early flowering buds off the verbenas, geraniums, heliotropes, &c., to encourage the plants to cover the ground as quickly as possible. The strongest shoots of chrysanthemums may now be layered, which will produce fine dwarf flowering plants for autumn flowering.

Plants growing in rustic vases, baskets, &c., should be watched and well watered in the evenings of dry days. During the continuance of hot, dry weather, frequent waterings should be given to all recently planted evergreens, shrubs, and bedding plants. Not a mere sprinkling of the surface, but a thorough soaking. Plant out and mulch dahlias with well decayed cow dung, and give plenty of water in dry weather, keeping them well tied up to neat stakes to prevent injury in windy weather. Fuchsias, planted in the open ground, are generally disfigured with a superabundance of ugly sticks; whereas, if planted with care, in good, rich soil, in a partially shaded border, they need but little support, one neat stake for the central stem will be found sufficient. Specimen fuchsias, in pots, will now require an abundance of water, and about once a week a good soaking of manure water. *Tritoma, uvaria*, and varieties. These beautiful plants, in dry weather, will require an abundance of water. The genus tritoma is one of our especial favorites; we have seen and admired it many years since at the Royal gardens at Kew, and many other places in Europe, where it is generally planted in conspicuous places upon the flower garden, and in the Shrubbery, where it forms an attractive and beautiful feature during the autumn.

During a visit to the experimental gardens at Washington last fall, we remember to have seen it in great beauty, and thought, at the time, we had never witnessed it so fine. It is a plant which we can recommend with all confidence to all lovers of handsome herbaceous flowering plants.

The end of the month is a good time to sow hardy annuals for autumn flowering. Ten week stocks, mignonette, himophelias, balsams, &c., flower beautifully in the fall, if sown at that time. Propagate the Russian and Neapolitan violets by division and planting in good, light, rich soil, in a shady border. Soon as the foliage is decayed, take up the bulbs of hyacinths, tulips, narcissus, crocus, &c., and to make sure the bulbs are well ripened, lay them in a shady place and sprinkle earth upon them. The common practice of laying them in the hot sun soon as taken up, is one cause why so many are worthless ever afterwards.

☞ "J. R. Glover writes to the New York Farmers' Club, that he has been so engaged in his experiments in hatching eggs artificially, that he has not had his clothes off more than two and a half hours, in any of the twenty-four for the last three months. The results of his persevering labors, he sums up as follows: "I have used up about sixteen hundred eggs, and I have now on hand, in good condition, sixteen chickens—just one chick to one hundred eggs!" Still he believes the thing can be done if we only knew how."

J. R. G. would have succeeded better if he had been an old hen, instead of the goose he appears to be.—*American Farmer.*

For the "American Farmer."

A Young Farmer's Work—Land Improvement.

[LETTER TO A FRIEND.]

VIRGINIA, April 22, 1867.

My Dear :—Our colored fellow-citizens having taken holliday to themselves, affords me an hour's chat with you. I pray you let politics alone—in the name of all that is worthy have we not had our quantum suff?—and strive now to build up the material interests of your State. There is no danger of Virginia losing her prestige—it would be safe with the negroes, who claim alliance only with "the hots" as they call them. The glory of our ancestry has been too lately vindicated by our brethren and sons to fear any loss of caste. Be content, therefore, in the knowledge of the fact that we can never be robbed of *our* birthright, and go to work like a man, and show yourself worthy of your high estate. You have fair land—a reasonable capital—are free from debt—have a young and admirable wife; and doubtless will imitate your forefathers in giving considerable increase to the population of the State, and have therefore, altogether, as fair a prospect for prosperity and happiness as any other unlucky devil whose lot is cast in "Cis alpine Gaul," alias District No. 1, formerly known as Virginia. Then turn your back on court-houses, public meetings and race courses, and devote your health and mind to the improvement of the talent which has been committed to you. I will do you the justice to say that I have no reason to find fault with your zeal and energy, tho' I am somewhat inclined to fear that you are too sanguine in your expectations. This results, I am inclined to believe, from a rather willing mind to run off with the theories of agricultural writers, and to assume that *all* that come from *respectable* sources are entitled to be followed *implicitly*. This will wear off in time, and if you exercise a small degree of prudence, the lessons you will have by experience will be rather beneficial than otherwise. Among others, I think you have placed too high an estimate on the "rotation of crops," and have claimed for it more even than your authorities have ever demanded. I am very sure, however, that you did not mean to be understood as going to the length, your letter would seem to indicate, that the mere rotation would eventually bring your land to a high state of fertility. I am not a scientific man as you know, and have less than no chemical attainments, and I can only answer you by what I have seen myself and learned of others. In the rotation of six fields I believe it is universally acknowledged by the best writers available to me, that in England one *full* manuring on rich land is necessary to *keep the land up* to its grade; hence on land not fertile, and not manured, we may readily imagine the result of cropping on any kind of rotation. If we cultivate (without manuring) for six years, although in different crops, it is clear to my mind that your land will be rendered materially of less value that if you had cultivated for the like period in the same crop. In the one case you rob the soil of the ingredients necessary to that *crop*, in the other, of the ingredients necessary to *six* crops.

Do not misunderstand me—I am entirely convinced that it is necessary to our ultimate success that we should adopt a rotation best suited to our respective soils—and I feel assured that if we will exercise the same zeal, industry and skill we used to exhibit as politicians, we will in a few short years be enabled to cope with the lands of any other part of the continent. I do not know your land sufficiently well to lay down a special rotation for you. I can only say, that, from your description of your soil, the six fields would suit you better than a less number. I would commence it in the rotation of six years with corn *heavily* manured—peas—wheat—clo. clo. wht. This rotation will give you one full manuring from your stables and barn yard, and two green manurings, upon which lime would act like a charm, and in a few years you will have your farm as rich as you can well make it. You will observe further that I avoid my own *execrable* practice of letting one grain crop succeed another. *You* can afford this—I cannot—for, unlike you, I have no money, and am in debt. You must not neglect to drain and lime. By heavy manuring you *may* make a fair crop, but nothing in comparison to what you would make if you let off all the surplus water, and give a good dressing of lime. Situated as you are, twenty-five dollars per acre to thoroughly underdrain, will be doubly repaid you in the *increase* of crops in the rotation of six years, and then you will have so much more satisfaction in your after cultivation. The outlay I know is heavy, but the return will be certain, and prove the very best investment you can make. Why can't you be Alderman Mechi, Jr.? There is a gentleman near Baltimore who has demonstrated that a wise application of money to the fertilization of land pays handsomely. He was called "a book farmer," "a high-pressure farmer," &c., was pitied and laughed at alternately. His scoffers had their day—now he has his. For every dollar expended by him—and he

spent it freely—he has drawn cent per cent., and he had about the most unpromising patient you ever saw. It *was* in the *last stages* of consumption; *now* it is in the best condition imaginable. Stop your politics therefore, and "go do likewise." Yours truly, S. B. F.

For the "American Farmer."

Notes of Western Travel.

On Monday morning I left Chicago, regretting my inability to remain longer and see more of this great city of energy, enterprise and magic growth—and particularly to see and attend the Illinois Agricultural Fair to come off that week—and for which preparations commensurate with the vastness of the great interest of which it was to be the type and illustration were going forward upon a scale and liberality such as Chicago might be expected to provide. But the urgency of my call westward forbade my lingering to enjoy what to me would have been a source of so much pleasure and satisfaction. To have seen here as in a nut-shell, the corn, rye, wheat, oats—roots and the sorgum—the cattle, horses, mules, sheep and swine—the great plows and harrows—planters, drills, mowers, reapers and threshers—teams, wagons and carts—wielded and directed by the skillful hand of industrious and well directed LABOR—as it must have been to draw from good old mother earth, such wonderful results and productions as are here presented in the comparatively brief space of time that this second Egypt has been under the subduing hand of civilized man. I say *subduing*—because man is literally called upon here to obey the first great scriptural command to "Subdue the earth." He appears here to be called upon to do nothing else. Nature has bountifully supplied and held together under the tough and tenacious sod, covering those almost boundless prairies, such apparently inexhaustible fertility, that man has only to break the sod, and a rich harvest will most certainly follow the sowing of the seed.

In my enumeration of the great variety of Illinois productions to be on exhibition at this wonderful gathering of Illinois farmers, I omitted to mention that delicate fibre, *cotton*, the innocent cause of so much bloodshed and waste of treasure; but yet so necessary to human comfort—and the loss of which during our unhappy civil strife has quadroupled the cost of clothing to our whole population—but which is most severely felt by the great laboring class of our people. To the laboring man, cheap food, cheap clothing, and cheap shelter are his three first wants, and the lawgiver who sports with or neglects, or destroys either, is an enemy to the labor of the country. Illinois has wisely begun in the southern counties of the state the cultivation of this important staple. May her experiment prove successful, and she be able to contribute to cheapen the cost of clothing, as she so largely has contributed to cheapen the cost of food to the labor of the country.

Starting out on the northwestern train for Prairie Du Chiren, and in the omnibus which took us to the station, I first encountered a tall, fine looking gentleman, whose dress and manner at once impressed me that he was from the south. Having been so long cut off from all intercourse and communication with the south, the temptation was strong to learn the true condition in which war had left it—its present wants, and prospects for the future. A few common place remarks soon satisfied me that I was not mistaken, and that I was in the presence of an open, frank and intelligent southern gentleman. He told me that he was from Memphis—that he had been largely engaged in building and managing the rail roads of the southwest, and that he owned a large cotton plantation in Mississippi—that the rail roads were broken up, and communication with the interior destroyed, and that through the whole country there were great destitution and distress—that he, like most other planters, had lost all of his effective labor, as well as his horses and mules—and that he had had left upon his hands between sixty and seventy women and children, with a few old men, which he had been supporting during the war—but he added, evidently with feeling, "I am unable to do this any longer." To my inquiry as to what would become of this class of people, he replied they will suffer—they must suffer—and thousands are now dying throughout the south for want of care and food—that their former masters, however so disposed, and thousands of them were so disposed, were too much impoverished to take care and provide for them—and the effective labor was so much scattered and demoralized by the war, that there was but little hope from it—that there was very little cotton planted since the war, and the prospect ahead for the south was gloomy in the extreme. I could but regret parting with so frank and intelligent a gentleman so soon, as at the end of our first hundred miles, which with this, then, interesting conversation was swiftly passed over. A glimpse of the country, however, as we passed along, did not entirely escape me. I could scarcely though arouse myself from the reflections this conversation naturally aroused. That a country, whose immense extent I

was then measuring at lightning speed, with resources and productions almost sufficient for the whole human family, with fields unexplored and capable of yet greater productions, should, by the wickedness and folly of its politicians, and against the will and wishes of the great producing class and labor of the country, be involved in such a war, with such direful and yet unmeasured results, did seem to me to be beyond understanding or comprehension. It shows, and conclusively proves, that when passion and ambition get control, prudence, wisdom and patriotism are entirely dethroned and destroyed.

But, to my journey. Soon after leaving Chicago, westward the country became more elevated and rolling. Here I saw the first hay rick worthy of the name. Immense corn fields, which my southern acquaintance assured me was the case all the way from St. Louis to Chicago—indeed, he said the country almost presented the appearance of one immense corn field. Sugar cane was also growing to a considerable extent upon nearly every farm. The Illinoians are thus struggling to be independent of the south for "sweetening," as well as for cotton. The true bond of union, however, is mutual dependence and reciprocal benefits. Nature has, undoubtedly, in the varied soil, climate, production, navigable streams and water power, presented to us this condition of mutual dependence and benefits. May we never again, in the weakness and foolishness of man, attempt to violate her laws. For some distance the country way meets the same aspect—until rising higher and feeling the atmosphere to become cooler and more bracing, I was informed by a gentleman near me, a returned federal officer, who was about to exchange his sword for the pruning hook, that we were in Wisconsin—and in Rock county, the richest and best county in the state. A more beautiful farming country my eyes never rested upon. Clear, open, rolling, without being hilly, well improved, for the west, better than I had before seen, with rows of fine Lombardy poplar—reminding me of old Virginia hospitality, of which they were the beacon and true ensign. But my paper is full, and I must reserve a further account for my next. A MARYLAND FARMER.

For the "American Farmer."

Sassafras and Persimmon Bushes.

I see in the April number of your *valuable Journal*, that some one wished to know how to destroy "Sassafras and persimmon bushes." The best way that I have tried is, to grub them up during the months of May and August, and cultivate the soil. S. S. N.

MACKEY'S FERRY, N. C.

For the "American Farmer."

Clover as a Fertilizer.

Messrs. Editors: In regard to the above article in your May number, I cannot refrain from giving some facts which apparently are not fully understood, or which have not been sufficiently appreciated. In 1852, Prof. Nesbitt, in England, (a high authority in agricultural chemistry,) showed by a series of experiments, that clover must NOT be *pastured*, if the field is intended for wheat. He established the facts, that clover pastured leaves over fifty per cent. less roots and fibres in the ground, than clover that has been allowed to blossom and then to be mowed for hay. The fact is, that the amount of roots and fibres correspond with the number of leaves and stems allowed to grow. By pasturing the clover is continually eaten off by the stock, not being permitted to grow to any extent, whereas by mowing, the clover unfolds a multitude of leaves and stems, before it is cut. Consequently the roots and fibres are multiplying to a great extent; and they are fully as much fertilizing agents as the leaves and stems. After the clover has been cut, no stock should be allowed to pasture it, but the aftergrowth left undisturbed to be ploughed under. If too heavy, roll it before ploughing. Should any one doubt the fact, let him dig a square foot of soil, two feet deep, where the clover has been mowed, and a square foot of ground of the same quality of clover, where it has been pastured, take the soil, each to itself, place it in a tub and wash it out, and he will be surprised by finding more than double the amount of roots in the former soil against the number in the latter.

Another advantage is, that the soil remains porous, it being protected by the foliage of the clover during the heat of the summer from the scorching rays of the sun. It still would be a greater advantage to the wheat, if the clover was not even mowed, but the benefit to the wheat would not compensate for the hay crop. The argument by advocates for pasturing, that the droppings of the cattle make up for the amount of clover consumed, would be a very weak one at all times, even if the pasturing did not diminish the amount of roots, as the droppings of stock, except sheep, are of next to no value, not being scattered sufficiently, and being exposed to the influence of sun and rain for months.

L. A. HANSEN.

Clifton, Fairfax Co., Va., May, 1867.

☞ A National Horse Fair is to meet at Trenton on the 11th of June.

For the "American Farmer."

Trouble about Vine Planting.

Editors of American Farmer:

Allow a subscriber to trouble you with a remark or two on the difficulties of selecting suitable kinds of grape for a vineyard. As the grape is just now engaging considerable attention throughout the country, and as many are disposed to plant vineyards who know but little of the merits of the several sorts of grapes most suitable for wine making, it is important that they should have some reliable source from whence to make sure that what they invest in this species of culture is not lost. To accomplish this end, the horticultural works published throughout the country are resorted to, as well as the books, catalogues, manuals, &c. published and sent out by the nurserymen who have vines to sell. The trouble is, that by the time one kind of grape is well "*puffed*," and its character pretty well established, and the novice has made a selection, and perhaps gone to the expense of planting his vineyard, he finds all his pains as well as expense thrown away, upon seeing in some paper or pamphlet, a notice from the *highest authority*, backed up by a *cloud of witnesses*, that the grape he has selected is good for nothing but to make vinegar. Now how is it that after all that has been said, and *as good as sworn to*, by the most eminent Horticulturist of the country, in commendation of the *Concord* for instance, that we now have it denounced in the manual of one of the most extensive grape men of the country as having no wine qualities, and none of any sort except "*hardiness*." Is it possible that its originator, and so many whose praises of it as a grape of high qualities we have read are so much mistaken as to its general merits? How are we to make a selection when these learned grape doctors so widely disagree? I have only stated a case which has actually occurred in this immediate neighborhood. The grape has recently occupied much of the public thought here, and some ten or fifteen thousand plants have been set out already, mostly of the Concord, Catawba, Hartford Prolific and Clinton Grapes, and we now have it announced that they, (the Concord and Hartford especially,) have no merit, or at all events will not make wine of any value, the very purpose for which they were selected and planted. How are we to know what kind to buy, or to whom are we to look for information? It would perhaps be best to apply to some one of our celebrated wine makers, (the Messrs. Longworths for instance,) who buy the wine from all the kinds of grapes, and who have no "*axes to grind*" of their own in the case. Can you help us out of the difficulty, if so you will confer a great favor.

ISAAC G. MASK.

Moorefield, Va., April 9th.

We appreciate the trouble of our correspondent and will give him the best comfort we can. We think he need not make himself unhappy about the opinion of "one of the most extensive grape men of the country" as regards the Concord or other grapes. We do not charge, as we find is often done, that such an opinion originates in interested motives. It is nearer the truth we think to say, that it is the opinion of one whose taste in such matters is refined to a degree far above that of the great public for whom we propose to work when we plant Concord grapes for the market or for wine, and his taste gets the better of his judgment, just as we see wine drinkers who have so cultivated their taste that they despise, or affect to do so, that which the mass of consumers are content to take as very good, and are glad to get it. In the first place, the Concord is of better quality in Maryland than in New York; but acknowledging as we do freely that it is inferior in quality to the Iona, Delaware, and some others, and does not please the taste of the amateur, yet it is *a good grape*, which pleases a great many people who want to buy grapes, and makes a fair wine, which satisfies a great many people who want pure wine at a moderate price. There is, and is likely to be a good demand for it in market, and that is the first consideration. This demand is likely to be continued because it can be supplied at a much lower price than any now known grape, on account of its hardiness, its resistance of disease, the certainty of the crop, and its great productiveness.

The Catawba has been the chief of native grapes, and might be so still, but for the disease which of late years has so blighted it. We would not now plant it largely for this reason, but if planted would give it the best care in the hope that it might change in this respect. The Hartford Prolific is a good grape, but not superior to the Concord in any respect except its earliness, and does not bear carriage as well. The Clinton is very productive, and a very good wine grape. Suppose that neither the Concord nor Clinton makes as good wine as the Delaware or Iona, if it is produced with a great deal more certainty, and in much larger quantities, it is nonsense to say that for ordinary planting and unskilled grape growers they have no value. For such the *Concord is the Grape*.—[EDS. FAR.

For the "American Farmer."

Proportion of Teams and Hands to Number of Acres.

CLIFTON, FAIRFAX CO., VA., May, 1867.

Messrs. Editors:

In your number for this month, several questions are asked by Mr. E. Hunt, Caswell county, N. C., in regard to number of teams and hands necessary on a farm. I would refer him to an article in March number, headed "Labor question again—change of system," which will show him that a horse is required for about every twenty-five acres. It depends, of course, on the mode of farming adopted, and how teams are worked, to determine what amount of team is required. If rational farming is carried on, twenty-five acres are as much as a horse or mule can attend. If the old mode of farming is followed, a horse may attend from thirty to thirty-five acres. The larger the farm is, the less team is required in proportion, because they can be worked to better advantage, having larger fields and consequently not so much loss of time by going from one work to another. Besides a spare horse for the family is needed as well on the small as on the larger farm. Altogether our farmers are not careful enough in estimating the loss of time generally occurring on a farm. How easy are ten minutes lost every day by starting too late morning and evening. Ten minutes a day by one team, makes fifty working hours per year or five days entirely lost, without the least benefit to man or beast. The same is applicable to other work. Always have a fixed place for your tools and implements, so no time may be lost by *hunting* for what is required when you want to start work. More time is lost by not paying the strictest attention to this point, as most are aware of. With regard to system, I likewise refer to the above mentioned article, which, mean while, can be modified according to soil, climate, location, &c., &c. Finally we come to the wheat question. You are perfectly right in not advocating sowing wheat after corn or tobacco. Wheat, in our climate, requires, under all circumstances, to be sown early to secure a good crop. Sowing wheat after corn and tobacco not only prevents early sowing, but the soil is *too loose* for wheat. Loose soil will bake and wash during the winter, if the wheat has not been sown early enough to cover the ground perfectly. Wheat requires a rough and compact soil. This is best obtained by either breaking clover or timothy sod, or sowing wheat after oats. Strange to say, oats is a very good predecessor for wheat in our climate, although in Europe it is established to be one of the worst. If you grow potatoes or turnips, your corn and tobacco land is the very place for them, as they require mellow soil. After this crop sow barley or oats, with clover and timothy, and you will have the finest meadow or pasture you can wish for. In our farming operations we must not strive *too hard* for an immediate return of our outlay, at the expense of our land, but have an eye to the permanent enrichment of our soil, which we can obtain in no better and easier way than by a good grass sod. A good sod will produce plenty of pasture and hay, the necessary agents to procure manure, and if ever you break this sod, you are *sure* of a *good* wheat crop.

L. A. HANSEN.

For the "American Farmer."

Mildew in Grapes—the Yellows, &c.

Messrs. Editors:

I infer from Mr. Creed's communication, published in the October number of the *Gardener's Monthly*, that the sulphur remedy for mildew in grapes is new and novel to the community generally. I have cultivated the vine, to a limited extent, upwards of twenty-five years, and when I dusted my vines with sulphur, at the first appearance of mildew, I always had an abundance of sound grapes and green, healthy foliage. In my small way I dust by hand or with a dredging box. A properly constructed bellows or a centrifugal disseminator are, no doubt, the best (the latter particularly) to use for expedition and thorough work. I suggest that instead of a round nozzel attached to the bellows, that it be two inches wide and an eighth of an inch at the outlet, thus enveloping a wide instead of a round surface.

The origin of my information relative to the value of sulphur as a preventative against mildew in grapes originated in a conversation I overheard, about half a century since, by my late father and brother-in-law, Dr. Lythe. Although I was then a mere lad, I distinctly recollect the Doctor said his vines were in a very flourishing condition, and that he had an abundance of grapes; he also remarked that he dusted his vines with sulphur, and applied some about the roots.

It is well known that sulphur is an active fertilizer. It is also a certain remedy against mildew in grapes.

THE YELLOWS.

What every one says can't be done all exclaim (except the enthusiast and Sam. Patch) "so say I." As the remedy for the yellows is yet in embryo, and I not being sure what the disease

is, I will simply say that in the summer of '64 I noticed several small peach trees (planted in a clay loam, bearing a northern aspect) were diseased, and, apparently, dying. The leaves were yellow or rather orange color, small protuberances on the leaves, and all curled. I thought of applying diluted sulphuric acid, coal or fish oil, fumigating with sulphur and charcoal, or both united, but on consideration I determined to try mercurial ointment. It was melted in an iron pan, and applied with gloved hands. The summer sun caused the oil to run down the body of the trees. I was apprehensive when winter approached that the frost, united with the ointment, would cause death. A very short time after the application, however, the leaves regained their original foliage, were entirely healthy in the year '65, and are to this day as thrifty as any tree on my farm.

For large trees it would occupy too much time to cover each branch as I did; probably the dose I gave my trees was unnecessailry strong. It may be that highly diluted mercurial ointment will act as well, it ought to be applied by a garden engine. If diluted with (hot) water, frequent or constant stirring will be necessary, which can be done by a plunger attached to the pistern or lever of the engine. For fumigating trees or vines on an extensive scale, a small iron furnace, an iron pot, several rubber or oiled cloths, and two wooden lifters will be necessary. By lifters, I mean two long ash poles with 1¼ inch cross pieces, 6 feet long, studded with sharp pointed nails to hold and aid in placing the cloths over trees or vines. The cloths ought to be large enough to reach below the lowest branches.

Without seriously deviating, I would say that fumigating poultry houses with sulphur and its application to the birds is a sure remedy against parasites. It also acts as a preservative if applied to smoked or fresh meats, mixed with lard, an admirable remedy against the mange, &c.

The C. Disseminator alluded to, may be propelled by horse or manual power. I have made and used them as agricultural machines, for spreading lime and other fertilizers. As an engine of war nothing, I imagine, could be constructed more destructive to human life. A machine made on the same principle (attached to a man's body) for manual power, is valuable for sowing grain and grass seed, dusting vines with sulphur, &c., also, by a quick turn of a crank, a man (a police officer for example) could disable (with round shot) a crowd, thus preventing the disagreeable necessity of taking life.

Now, Messrs. Editors, I have not taken out a patent for these inventions, (if I may so call them,) neither do I intend to; and will allow you to use them and my communications with impunity. I feel quite obliged for the privilege I have enjoyed of a place in your journal for my scribbling. It has afforded me entertainment and profit of which otherwise I would have been deprived.

As the season for active, out-door work has arrived, I must bid you adieu. PLOWMAN.

Balto. Co., Md.

For the "American Farmer."

The Santa Barbara Grapevine, &c., &c.

In the April number of the "Farmer" a correspondent—"Mississippi"—describes a Scuppernong vine, which he insists is of more wonderful proportions than the celebrated vine at Montecito, in Santa Barbara county, California. I think he is in error. According to the description published in the November ('66) number of the "Farmer," the Montecito vine yielded 8,000 pounds of grapes *per annum;* which, in Southern California, is equivalent to eight hundred (800) gallons of wine.

In the spring of 1860 I had occasion to visit Santa Barbara, and went to Montecito for the double purpose of bathing in the hot sulphur springs and seeing the great vine. According to the statements then made to me by parties of undoubted veracity, the yield, *per annum*, was set down at 10,000 pounds of grapes, from which 1000 gallons of wine could have been produced—ten pounds of grapes of the same variety, and identical in quality, producing a gallon of wine throughout the southern counties of California.

If Montecito looked down upon Chesapeake bay, instead of the broad waters of the great Pacific, the produce of this single vine would readily bring *five thousand dollars per annum!* Ye Baltimoreans, who have not crossed the Continent, are yet to see *such* grapes as are borne on "the old woman's vine" at Montecito.

The mention of grapes and wine, carries me back to Los Angeles, where more than fifteen hundred acres are in vines; and to Anaheim, with its thousand acres, and finally to "Lake Vineyard," the splendid place of B. D. Wilson, Esq., with its 200 acres of vines, its plantation of olives, oranges, limes, lemons, figs, &c.; and I read with a smile of derision of the "Hermann settlement" in Missouri, and think how easily the whole concern could be *lost* in Don Matteo Keller's huge vineyard, and how he used to surprise all visitors by the immensity of his cellar, and his own hospitality.

In conclusion let me beg this latter gentleman,

or Mr. Wilson, or Col. Harasthy, to contribute an article to the "Farmer" describing the vineyards and wine interest of California as it is *now*. Tell us of all your fine places, of your millions of vines, how the business pays, &c., bearing in mind that few here have any conception of the immensity of the business.

GEORGE W. GIFT.

MEMPHIS, TENN., April, 1867.

For the "American Farmer."

Immigration.

CLIFTON, FAIRFAX CO., VA.,
May 1st, 1867.

Messrs. Editors:

In your last number I have read a very able article, "Large or small farms," etc., etc. The views taken therein of our present situation are, I think, correct, with exception of one point, to which I most decidely object. It is this: "*For one, I do not wish to see foreign immigration. I fear it may prove an addition to our already overgrown pauper population, and fuel to the flame of fanaticism, which is now scourging us.*" If the gentleman had had the required practical knowledge of the nature of the laboring class of emigrants without capital who come to the United States, he would not have expressed the above sentiments. Out of one hundred poor laborers who arrive here, *at least* ninety are industrious people, *willing* and *able* to work, modest in their demands, and neither willing nor able to meddle with politics. Who, but the laboring class of emigrants, have built up the West and Northwest? If we could be fortunate enough to obtain a sufficient number of these emigrants, our present troubles with labor would soon be overcome. But although we have an "Emigration Society," supported by the State, still our hopes for relief by this society are very small. *They can* or *will* not realize that they never will obtain a sufficient number of emigrants without having their very active agents, able to speak the different languages, both abroad and in our principal seaports. Every State of the West, Northwest and North, have their agents both abroad and here; but the "Emigration Society of Virginia," has confined itself to obtain a few emigrants from England. The society lost, by not having the required agents, a lot of Danish emigrants, bringing with them $280,000 in gold. Certainly it would have been a benefit to Virginia if she had got them. But so it goes. Things are started and supervised by men not having the practical knowledge required, and too conceited to take advice.

L. A. HANSEN.

BEALETON, VA.

Editors American Farmer:

DEAR SIRS: Enclosed please find two dollars for your valuable assistance rendered me during the past year. Am sorry that I have been so dilatory, but it is the first moment since your *renewal* that I have had the money to spare. Mine is the oft repeated tale of war devastation—houses, enclosures, every thing but my land and timber destroyed. I had to begin "de novo"—and now just begin to see my way out of the woods.

I have now to do my own gardening, and as I have no experience whatever, would suggest to Mr. Barker that he would confer a great favor upon *my class*, by telling us *how*, as well as *when*, garden seed, of all kinds, should be sowed or planted. I find much trouble in not knowing how deep, how thick, &c., seeds should be sowed.

With many wishes for your success, I am

Very respectfully, yours, &c.,

R. H. D.

WHITEWASH FOR OUT-BUILDINGS.—In response to an inquiry for the best whitewash for barns and out-buildings, the Massachusetts Ploughman says: "Take a bushel of well-burnt lime, white and unslaked, twenty pounds of Spanish whiting, seventeen pounds of rock salt, and twelve pounds of brown sugar. Slake the lime and sift out any course lumps and mix it into a good whitewash with about forty gallons of water, and then add the other ingredients and stir the whole together thoroughly, and put on two or three coats with a common brush."

To make a cream color, add to the above three pounds of yellow ochre; a fawn color, four pounds umber, one pound Indian red, and one of lampblack; if a gray or stone color, add four pounds of raw umber and two of lampblack.—*Ex.*

☞ The *New Orleans Price Current* gives a list of the sugar plantations of Louisiana and the products thereof last year, compiled with care, and believed to be very near complete. The estimates for the entire crop range from 40,000 to 42,000 hogsheads. Of the number of acres planted this year there is no positive information, but it is known to be much greater than last year, and the coming crop estimates range from 80,000 to 100,000 hogsheads. As high as $200 per arpent has in some instances been paid for seed cane by parties wishing to resume the business of sugar making. The *Price Current's* estimate of last year's product of molasses is 65,000 barrels.

Labor and Immigration.

Our Maryland readers need not to have commended to them the following able report submitted to the Senate of Maryland by Col. Oden Bowie. The subjects are treated with the good sense of a practical statesman, and the suggestion as to an agent of immigration, abroad as well as at home, is one that has been strangely overlooked. Our experienced and intelligent correspondent, L. A. Hansen, well remarks, on another page, upon the necessity of "very active agents both abroad and in our principal seaports."

The Committee upon Labor and Immigration beg leave to submit the following report:

The Committe have given to the subject the anxious and thoughtful consideration which its paramount importance demands.

Since the sudden abrogation of our hereditary and patriarchal system of involuntary servitude, greatly unsettling and demoralizing, as might have been expected, that hitherto useful and contented class of labor, no subject has arisen of more immediate and pressing importance to the agricultural and planting interest of the State.

The black man, naturally kind, amiable, and submissive, is admirably fitted for the servile condition which for two centuries he has so advantageously occupied in this country, and under which he has been lifted from a state of barbarism and heathenism to one of civilization and Christianity. Whether in his new condition of freeman, he shall be able in the great race of life to cope successfully with the more active and enterprising white man, is a problem which time alone can solve. If we compare his condition in the free States, where for generations no impediment has existed to his moral and intellectual improvement, with rare exceptions, we must conclude that a retrogade, instead of an advanced condition, is his unhappy fate. Truthfully and graphically as he was described by his liberator, President Lincoln, "a houseless, homeless and landless race," instead of bewildering and intoxicating his mind with ideas of learning and literature, and social and political equality, he had been taught that work—honest, faithful work—was the first great lesson of life; and that by work, and work alone, could he gain an honest livlihood, and lift himself from want and degradation to independence and respectability, our jails and penitentiary would not now be filled, as they are, to repletion with colored criminals, and this legislature engaged in the difficult task of seeking foreign labor as a substitute.

As Marylanders, so long and so intimately associated with this class of our community, we cannot but feel a deep solicitude in their future welfare. Their present condition has been forced upon them without any agency of their own. They are not responsible for it. From former services and dependence they demand our sympathy and assistance. and all impediments, if any exist, to such employments and avocations as they are fitted for, should be removed. But to admit the negro to social and political equality is contrary to long established habit—revolting to taste and judgment, and violative of the laws of God, who, in His own wise providence, has placed the two races as far asunder as light is from darkness. The welfare of each demands that they shall move in their appropriate spheres. When forced from it, commotion, agitation and conflict will inevitably follow, and a war of races, ending only in the extermination of the weaker, will be the end of the experiment.

Labor, then, being the key to production, and absolutely necessary to the cultivation of the soil and its full development, it becomes interesting to investigate the nature of labor—what it accomplishes; what are its wants and duties; and how ought it to be dealt with.

WHAT IS LABOR?

According to Webster, labor is defined to be "physical toil, bodily exertion, muscular strength, painful effort, directed to some useful end." In agricultural pursuits, it encounters fatigue, exposure to all weather—heat and cold, wet and dry, frost and snow. It has one never ending round of duty, from sun to sun, from week to week, and from month to month. There is no period of the year at which farm labor may not be usefully and profitobly employed. Then, what does labor accomplish?

Labor fells the forests; drains the swamps; furrows and plows the fields; sows, reaps and harvests the crops; threshes, cleans and prepares them for market; makes roads, digs canals, builds houses, towns, villages and cities. From the sowing of the seed to the harvesting of the crop—from the humblest cottage to the palace and full-grown city, this indispensable agent, labor, is always present; always toiling; always necessary. Its wants, then, obviously become the next subject of inquiry.

The wants of labor, primarily, are food, clothing and shelter. But since the system of involuntary labor has been abolished, and we now buy labor like any other commodity in the market, its demands must not be neglected. In this age of scarcity and competition, not only the physical, but also the moral and intellectual

wants of labor must be supplied. The wages of labor, like every other commodity, are regulated by the laws of supply and demand. In this country it is not likely to sink so low as merely to supply the natural wants of man—such only as food, clothing and shelter. It has higher aspirations, and the good of society and the welfare of the State demand that these aspirations should be encouraged and provided for. Hence, schools and churches become a necessity if we would attract and permanently domicile a desirable class of voluntary farm labor. In addition to this, the innocent pastimes and amusements of foreign nationalities should also be provided. Labor must have its relaxations and diversions, or like the bow which is always strung, it soon loses its life and elasticity. If diversions, of an innocent character, are not provided, those of vice and immorality will be sought and indulged in.

The physical nature of labor being understood and appreciated, its great achievements acknowledged and its wants—physical, moral and intellectual—provided for, it follows as a moral, legal and religious obligation on its part that labor should return a faithful, willing and active service to its employer. Not only should an honest day's work be performed for an honest day's wages, but the interest of the employer should be the interest of the employed. This, on the farm, can be shown in a variety of ways, viz, by the care of tools and implements, attention to stock, to fencing, and a general oversight and readiness to assist in unforseen accidents, or to put in place and order whatever may accidentally be out of order. This interest and attention on the part of labor never fails to meet an acknowledgment and due appreciation.

On the other hand, it is the duty of the employer to meet with punctuality and exactness his promises and engagements to his hired labor. "The laborer is worthy of his hire," is an injunction of holy writ, and a curse is pronounced upon him who "keepeth back the wages of the hireling." Therefore the highest moral obligation as well as self interest, common honesty and justice require a scrupulous exactness in the discharge of this part of the contract.

The wants of labor require that the payment of wages should be divided and made at frequently recurring periods, either weekly or monthly, as the case may be. For the employer it is generally easier and better to pay his hired labor in monthly instalments, than in one annual payment; and it enables the laborer to buy for cash, and to keep out of the clutches of merciless venders of the necessaries of life, for which he would have to go in debt, did he only receive his wages at the end of the year's services.

Thus far your Committee has only considered manual labor, because it is fundamental and necessary to give direction to all other kinds of labor. Animal labor has been used, and is destined by the skill and inventive genius of our people, still more to be used, to modify and economise farm labor. The elements of wind and water can also, in many situations, be turned to good account; and steam is being economically applied to too many uses, to doubt that at no distant day it will be made tributary to the toil and labor of the husbandman.

Your Committee having noticed the destruction of involuntary labor by sudden emancipation, its consequent demoralization and unreliability, and as pertinent and necessary to a due and proper consideration of the subject of organizing a system of voluntary to replace the involuntary system bequeathed to us by our forefathers; having considered the nature of labor, its importance, its wants and duties, and also the duty and interest of employers in dealing with employees, it now becomes necessary to inquire from whence a supply of labor can be obtained.

If we for a moment consider the vastness of our common country—the number of States and great variety of employments seeking and competing for labor—your Committee must confess that this a difficult and embarrassing question. And yet, if we remember the character, energy and enterprise of our people, the peculiarly advantageous position of our State—near the sea board—with our great commercial emporium at the head of one of the noblest bays on the globe, and our close proximity to the Capitol of this great nation, we at once see that we have the strongest and most encouraging motives for effort, and a strong probability of success within our reach.

Probably the most fortunate circumstance for Maryland, at this time, is the establishment of lines of steamers directly from Baltimore to and from Liverpool, England, and Bremen in Holland. These steamers are calculated and expected to bring into the port of Baltimore annually from 10,000 to 15,000 foreign emigrants. A large per centage of these emigrants are farm laborers. They have heard of our free government—where freedom of religion, freedom of occupation, and the pursuits and objects of life are before them and open to all. They have also heard of our vast domain and boundless and Western prairies—where farms are cheap, and labor scarce and high—and the attractive West is presented to them before leaving their father-

land by agents from Western States, and large railroad corporations, as the land of promise, and the goal of all their hopes and expectations, so that when landed here no persuasion or inducement can divert them from their original destination, and they hurry off by our railroads for the great West, as fast as steam and rail can carry them. To detain them here and induce them to settle in Maryland we must pursue the same course which has been so successful in attracting them to the West. The Legislature of 1866 has wisely created the office of Commissioner of Immigration, and imposed upon that officer onerous and important duties. The duties are doubtless well performed, but the appropriation and compensation appears to be altogether inadequate to the adoption of a full and comprehensive plan for the reception and accomodation of so large a body of immigrants as is expected to arrive annually in the port of Baltimore; and no provision whatever is made for sending an agent to Europe, which the Committee believe to be absolutely necessary to the successful working of the commission at home. First impressions and predilections are strong and difficult to eradicate—and if the agent is successful in creating an impression upon immigrants before embarking, favorable to Maryland, the first settlers will, by correspondence and otherwise, draw after them a stream of immigration to fill up our sparce rural population—and sufficient to occupy and improve every county and neighborhood in the State. The Committee would therefore strongly recommend the appointment of an agent in Europe under the direction of and to co-operate with the Commission at home.

There is one other point, although not directly connected with the question of labor and immigration, yet so important in its effect upon that subject, and the general wealth and prosperity of the State, that your Committee beg leave to present a few observations upon it. Your Committee allude to the subjects of roads, turnpikes, canals, railroads, &c. These afford the means of transporting the productions of labor to market, and add to or diminish the cost of labor according to the cheapness or dearness it costs to bring it from the place of production to the place of sale. Whatever cheapens the cost of transportation, cheapens the cost of production, and consequently adds to the value of labor; hence the great importance of opening, constructing and making as perfect and useful as possible the roads and highways of the State. These of every description which capital can be found to build, it is obviously the *interest and duty* of the State to foster and encourage by all necessary legislation. It is difficult to find an individual or community that a good road or highway has ever injured. On the contrary, their benefits and advantages can only be counted by millions. Not only millions of dollars have been gained by the introductions of roads, turnpikes, railways, &c., but what is more valuable, the great saving of time they gain for the community.

Who can estimate the days, weeks and months gained in the aggregate by the hundreds and thousands of people that are constantly passing over our railroads? Take, for example, the Washington Branch Railroad, and compare it with the slow stage coach of former days—then it took ten hours to transport ten passengers per coach between the two cities; now forty passengers per single car of a train of six or eight are carried in two hours over the same distance, equal to a loss of time consumed by stage travel per ten persons of one hundred hours—against forty by railroad of eighty hours—or in other words, a gain of eight hours per day for each passenger who passes over the road—or in the aggregate, of the enormous gain of 2,560,000 hours per annum by the use of steam over horse power on one short road of only forty miles in length—which is equivalent at ten hours per working day, to 25,600 days labor.

Your Committee have, in accordance with the views presented herein, reported a bill looking to the sending abroad a commissioner whose efforts shall be directed towards influencing immigration to Baltimore by steamers and sailing vessels. This bill also endeavors to provide a means to detain and keep permanently within the limits of the State the flow of immigration which the establishment of the lines of steamers heretofore spoken of in this report will do so much to attract, but which the cupidity and interest of the great railroad company establishing those lines of steamers prompts to transport out of the State over their long line of railroad, and whose "runners" scarcely allow the immigrant to set foot on our soil for one moment, or exercise any volition in selecting his future residence, but hurry him off to the depot to be moved with railway velocity outside of our own State to the great West, whose prosperity and population he has done so much to increase. If the bill reported does not prevent this, other legislation must be inaugurated to stop it.

Your Committee have but one other suggestion to make.

Immigration will not go where facilities for ready access to market are denied. Fortunately, our State is being checkered all over its beautiful

surface with railroads, either projected or in process of construction. Let the "Maryland system," of which we hear so much, be turned to the improvement of our whole State, rather than to the aggrandizement of an already overgrown and overweening corporation. Let us encourage the construction of *all* works of internal improvement in the interest of Maryland, rather than confine our legislation to the benefit of *one road* for which the State has already done so much.

Let *this* be the "Maryland system" in future, and blessed as we are with soil, climate, water facilities, mineral wealth, water power, geographical location, public schools and places of worship, and a resident population, a nobler than which does not exist in any land, and our future prosperity and pre-eminence will be as great as the most ardent lover of our State could wish.

ODEN BOWIE, *Chairman*
Committee on Labor and Immigration.

An Important Law—Caution to Trespassers.

The following law, enacted at the recent session of the Maryland Legislature, is of importance to farmers, gardeners, &c. To the people of Baltimore county, residing near the city, it is of special interest, and if properly enforced cannot fail to protect them to considerable extent from the depredations of gangs of youths, as well as others, who make it a practice to leave the city daily and roam about the premises of strangers, destroying shrubbery, fruit trees, plants, fencing, &c.

Section 1. *Be it enacted by the General Assembly of Maryland*, That the act passed at January session, eighteen hundred and sixty-four, chapter two hundred and forty-seven, entitled an act to add an additional section to article thirty of the code of public general laws, relating to crimes and punishments, is hereby repealed, and re-enacted so as to read as follows:

That any person or persons who shall enter upon the land of any other person or body corporate or politic in this State, and shall wilfully and maliciously injure or destroy any house, take and carry away any growing tree, vine, plant, shrubbery, root, vegetable, fruit or grain, or any fencing, cord-wood or hoop-poles, shall, on conviction thereof in any of the courts, or before a justice of the peace of the State having jurisdiction thereof, be adjudged guilty of a misdemeanor, and be fined not less than five dollars, nor more than one hundred dollars, or be imprisoned in the city or county jail not less than one month nor more than two months, or be both fined and imprisoned, as aforesaid, in the discretion of the court or justice of the peace aforesaid, and that this act shall apply to Allegany, Frederick, Prince George's, Harford, Washington, Baltimore, Kent, Queen Anne's, Talbot, Caroline, Cecil, Somerset, Carroll, Worcester, Anne Arundel, Montgomery, St. Mary's, Charles and Howard counties.

Sec. 7. *And be it enacted*, That this act shall take effect from the date of its passage.

The Hurdle Fence.

In our number of April 6th, Mr. S. H. Hall inquires how the English Hurdle fence (movable) is constructed. We are indebted to the kindness of an English lady for verbal information concerning it, which we give as follows:

It is constructed in sections of different lengths, according to the material at hand; sixteen feet, perhaps, being as convenient as any. To construct a section, take two stout sapling stakes, six feet long, and sharpen one end of each so that it will drive into the ground. Bore five inch and a half holes through each, the upper one six inches from the top, and the other four distributed along down as you wish to arrange the bars. Take oak poles of uniform length (for each panel) sharpen the ends to fit the auger holes, and put the parts together. Place a piece of split sapling across the bars in the middle and nail it to them, and add braces of split saplings, running from the top of the cross piece in the centre to the bottom pole at the stakes both ways, and a panel or length is complete. When you have a sufficient number constructed, set them in this wise. Set the panels end to end in a straight line, with the stakes at the joints nearly touching each other. Drive the stakes into the ground till the panel stands with sufficient firmness to answer the particular purpose intended, and couple them together at the top with withes. When you wish to remove the fence, you have only to slip off the withes pull up the stakes carry your panels where you will and set them up in the same maner, slipping on the same withes.

The same general plan may, of course, be varied to suit the particular purposes for which it is intended. If to turn cattle only, three or four horizontal poles, properly placed, would be sufficient. If designed to turn hogs only, it may be made lower with the bars nearer together. We understand that Mr. W. G. Bartlette, of Windsor, Dane county, will construct these fences for any who may desire his services.—*Wis. Farmer.*

Great Sale at Sudbrook Farm, near Pikesville, Baltimore county, Maryland.

Mr. J. Howard McHenry, the proprietor of the Sudbrook estate, designing to make a prolonged visit to Europe, offered at auction on the 3d and 4th instant, nearly the whole of his remarkably fine stock of horses and cattle. The horses were thoroughbreds and Norman Percherons; the cattle, Alderneys and Devons. As Mr. McHenry has long been noted for the superiority, particulary of his Alderney herds, a brief statement of the prices at which they sold, will interest breeders everywhere.

Among the horses sold was Mars, a superb thoroughbred; foaled 1857; sire, Basil by Mariner, out of Cassandra, by Priam. Col. Edward Lloyd, of Wye, was the fortunate purchaser at $550, about one-third his value.

Dr. Thorn secured the Percheron Norman stallion, Little Corporal; foaled 1859; sire, Duke of Normandy, imported in 1851, by Mr. Samuel Holman, Chester county, Pa.; dam, Snow Drop, imported for owner by late Col. Carroll, Howard county, Maryland. The Corporal weighs 1,300 pounds, and is the most activ Norman we ever saw. He would let in any county in western New York at $1,000 per annum, and yet he sold for the trifling sum of $530. This horse should be put to one of the superb mares of the same race, recently imported by Mr. Ficklin, of Albemarle, Va.

ALDERNEY COWS.

1. Custard, imported by J. A. Taintor, Esq., Hartford, Connecticut; calved 1855; sired in Jersey. $91.

2. Peace, calved 1855; Sire, imported Commodore; Dam, imported Hope. $105.

3. Plenty; calved March, 1859; Sire, Reward by imported Commodore out of imported Faith; Dam, Peace. $265.

4. Ceres, calved August 11th, 1860; Sire, Reward, (sired in Jersey; Dam, imported Charity;) Dam, Gazelle. Imported by J. A. Taintor, Esq. $305.

5. Topaz, calved 1861; Sire, Comus; Dam, Pearl, (sired in Jersey; Dam, imported Faith, $305.

6. Highhorns, from the herd of J. A. Taintor, Esq. $165.

7. Cow, calved May, 1863; Sire, Buckskin; Dam, Constance. $230.

8. Pauline, calved December, 1863; Sire, Buckskin; Dam, Peace. $380.

9. Cow, calved November, 1863; Sire, Buckskin; Dam, Constance. $135.

ALDERNEY BULLS.

1. Bull calf, dropped June, 1866; Sire, Potomac; Dam, Dove, by Buckskin, out of Fawn. $85.

2. Bull calf, dropped May, 1866; Sire, Potomac; Dam, Pauline, by Buckskin, out of Peace. $65.

3. Bull calf, dropped August, 1866; Sire, Potomac; Dam, Candour, by Figaro. out of Constance. $75.

4. Bull calf, dropped September, 1866; Sire, Potomac; Dam, Canary, by Comus, out of Custard, $80.

Bull calf, dropped February, 1867; Sire, Potomac; Dam, Constance, by Relief, out of Gazelle, $70.

ALDERNEY HEIFERS.

1. Heifer, calved February, 1865; Sire, Buckskin; Dam, Constance; served in March, by Alderney bull, Earl. $275.

2. Heifer, calved May, 1865; sire Potomac; dam Topaz. $270.

3. Heifer, calved September, 1865; sire Potomac; dam Ceres. $220.

4. Heifer, calved December, 1865; sire Potomac; dam Peace. $210.

5. Heifer, calved February, 1866; sire Potomac; dam Constance. $255.

6. Heifer, calved September, 1866; sire Potomac. $185.

7. Heifer, calved September, 1866; sire Potomac; dam Ceres. $200.

DEVONS.

Three yoke Devon oxen, of which two yokes are in their prime, and the other has not yet reached that stage, brought respectively, $308, $390 and $285.

The reader will remark that the cattle sold better than the horses; this may possibly be attributed to the fact, that the horses were sold before, and the cattle after a magnificent entertainment given by the hospitable owner of Sudbrook.—*Turf, Field and Farm.*

☞ J. W. Brown, Kensington, N. J., makes a calculation of the loss in plowing an acre of land fourteen rods in length by turning the team at the ends. If the furrows are nine inches wide, it will require about four and two-thirds hours to turn the team at the ends. If the acre was 50 rods long, it would require only one and one-third hours to make the turns. He estimates the distance traveled in plowing an acre at eleven and five-eight miles.

The American Farmer.

Baltimore, June 1, 1867.

TERMS OF THE AMERICAN FARMER.

SUBSCRIPTION TWO DOLLARS PER ANNUM.

RATES OF ADVERTISING:

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	1 *Mo.*	3 *Mo.*	6 *Mo.*	1 *Year.*
One Square.....	$2.00	$5.00	$10.00	$15.00
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One Page.....	25.00	60.00	110.00	200.00

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BALTIMORE.

POST MASTERS.—We take pleasure in acknowledging the many acts of civility and friendly assistance received at the hands of post masters, and beg that all will give us the helping hand, which we know to be so much in their power. Of some we have cause to complain—that they have failed to give the notice that the law requires of them, of the omission or refusal of a subscriber to take the paper from his office.

A HANDSOME DONATION FOR THE AGRICULTURAL COLLEGE.—Good words and good deeds propagate their kind with great certainty, when they fall on good ground. Last month we acknowledged a present of seeds for the College; this month we have growing plants. Mr. John Saul, florist and nurseryman, near Washington, has presented, through Mr. Barker, a collection of very select varieties of herbaceous phlox, verbenas, fuchsias, dahlias, chrysanthemums, geraniums, pinks, lantanas, gazanias, heliotropes, and miscellaneous bedding plants—the whole lot worth, at florists prices, about $40. This is a very acceptable gift, and will, we hope, be a reminder to others friendly to the purposes of the Institution, that they have the opportunity of doing it a kindly and, at the same time, valuable service. In entering on its new life, there will be needed for the garden and farm a very considerable expenditure, in a thorough restocking of all departments, and there are many who might give aid in this at little cost to themselves. Mr. Saul has shown a very commendable appreciation of this state of things.

"A Sorry Story but True."

Dr. R. M. writes from Selma, Alabama, and we make the following extract from his letter:

"Last year it looked feasible that I might indulge in the pleasure and profit of reading your journal, but after the total loss of river crop, and in fact a failure every where, the military, bankrupt, and our own homestead protection bills, the necessary credit for provisions checked, landed property esteemed a burthen merely, on account of taxes, the fall in price of cotton no longer remunerative, the increased and increasing price of provisions, hardly obtainable, we must anticipate nothing short of extreme suffering and destitution. This is a sorry story but true."

There have been very many tales of suffering and woe, which as being more personal, touched more our sympathies, but this summary of our respected correspondent tells in few words all the story of helplessness and hopelessness, which have come over a people numbered by millions.

Never was there a state of things where the words "The poor you have with you always," had so little meaning, as in these southern states before the war; perhaps never until now, has there been in a civilized and cultivated country, a ruin and desolation so general and wide spread.

PLOW, SEEDER AND ROLLER COMBINED.—A trial of this implement, advertised in the *Farmer*, is proposed to be had on the farm of the Agricultural College, on Thursday, 6th of June.

Being very highly commended as a labor-saving implement, by the certificates of many farmers, the proprietors, Messrs. Ewell & Miller, of Louisville and Baltimore, have been invited to make trial of its qualities at the College, and have accepted the invitation. A committee of competent gentlemen will be requested to be present, and report upon it, and others who may take an interest in it are invited to attend.

PRESIDENT OF THE MARYLAND AGRICULTURAL COLLEGE.—Charles L. C. Minor, Esq., of Hanover Co., Va., was, on the 24th of April, elected President of the Maryland Agricultural College. Professor Minor is a Master of Arts of the University of Virginia, and adds to experience in the instruction and government of young men, the qualifications of an accomplished scholar, and a christian gentleman. Gen. Custis Lee declined the appointment of the Board, because he sought occupation of a different sort, and the College is deemed fortunate in having his place so well filled.

Close of the Volume.

In closing up, as we do with this number, the work of the year, we commit it to our readers in some confidence that they will find it, on the whole, worthy of preservation for reference and re-reading. He who would read with most profit, must read over and again, what he has read, and we have aimed to provide for our pages mainly such matter as may claim to be read again. We have not designed to offer to Farmers a very cheap publication. There are others which certainly give more reading for the same money. But in condensing, so to speak, the material at command, (enough to fill half a dozen such monthly numbers,) the judgment of the editor is tested. Sir Walter Scott made three volumes of his Life of Napoleon, because, as he said, he "hadn't time to make it but one." The work of exclusion, where some fifty contemporaries, and very many permanent issues from the press crowd monthly upon the editor, is a real labour. If he has skill and experience to extract the good, and reject the indifferent and the worthless, he accomplishes a great deal for his readers. He saves them much time, and a great deal of mental distraction, to say nothing of the expense of paying for many where one or two may answer all purposes. A venerable gentleman paid us lately this homely, but very acceptable compliment: "I like your journal very much—there is no nonsense in it." We hold that it is no small matter to publish some four hundred pages in a year, and have "no nonsense in it." If we can not claim to deserve the compliment, we are pleased to know that a very sensible man prefers our journal to others for such a reason. To the extent that nonsense is shunned, good sense, it may be hoped, prevails, and we covet for *The Farmer* more than anything else a reputation for good sense and sound discretion in the matters of which it treats.

In the future, no effort will be spared, to maintain its past character, and make it more deserving still of confidence. We have no taste for the sensational in journalism, nor in matters of business, and do not therefore propose any wonderfully taking *new features*, nor to give *The Farmer* away to any one who will vouchsafe to make waste paper of it, nor to offer immense rewards of pianos, melodeons, farms and what not, to drummers, who will worry whole towns into subscribing for what they do not want and have no need of. But we shall be most thankful to friends who may use their influence in inducing to subscribe such neighbours as they think should read the "Farmer," and will gladly give Postmasters or others a commission very sufficient to pay them for any trouble they may take in our behalf.

Subscriptions.

We beg to call the attention of our subscribers to the fact that the present number of the *Farmer* closes the volume, and that subscriptions, payable in advance, will be now due for the coming volume. We have been flattered and gratified at the reception the *Farmer* has met at the hands of old friends and new acquaintances, and the promptness with which payments have been made in the past year—too often, as we know, at serious inconvenience—gives the best assurance of that appreciation which we seek. It is to friends who so demonstrate their good will, and those especially who favour us with useful matter for our columns, that we look for continued support, and an *increased circulation*. We know we do not ask of such in vain, to select some one or two or more, among their friends, and especially the young men, and make known to them the value and claims of our journal.

There are others among the number of our former subscribers to whom we have indiscriminately mailed the *Farmer* the past year, not insisting upon payment in advance, who have not shown any sense of the civility we designed to show them, either by payment or by acknowledging that they could not pay. Some of these we know to be such as, on this reminder, will make due amends, by paying for the past and the coming volume, or for the past at least. Others, who, struggling with the times, have intended and hoped to pay, and have not, really, been able to do so, will, as some have done, frankly tell us so; while other some will still think it harder to part with the little sum they owe us, than to bear the consciousness which these lines are designed to bring home to them, of leaving undone *a small thing* that they ought to do. As we drop them from our lists, they'll "die and give no sign."

☞ Six cases of trichina have occurred in Springfield, Mass, all in the family of Ransley Hall, from the eating of ham; and a daughter of Mr. H. died on Monday, 25th, from this terrible disease. Mrs. Hall is in a critical condition. The ham had been purchased about a week, and was eaten without being cooked.

Should'nt eat their meat raw—very foolish.—*American Farmer.*

☞ Some farmers sell two crops in the winter. In the fore part it is hay, in the latter part hides.

Mangold Wurtzel.

P. S. writing from Monroe, La. very kindly gives us his opinion of the value of this root, which he says is much more productive and more easily cultivated than Carrots, and "makes good feed for Hogs and Cows, without cooking." We agree with him in his estimate of the crop, and hope to see its cultivation increased. Two methods of planting he says are practiced in Germany, one by preparing ground, and marking it with furrows 18 inches each way, and putting several seeds at each crossing, thinning afterwards to one plant, and working with cultivator both ways; and the other to sow the seed early in a sheltered border very thickly, broadcast, and on a rainy day in the latter part of May, or early in June, transplant the plants into the prepared ground. He says, "This mode, I think, is best, as it leaves the main work until after corn planting is over, and the plants have a fair chance to get the start of the weeds."

In conclusion our correspondent says—"Please don't make fun of the manner, style or spelling of this letter, as I am no Yankee repudiating your paper, but only a poor foreigner, without an hour's schooling in your language in his life." We can say of our friend's letter that it is far superior in "style, spelling, &c." and especially in "manners" to that written by a born American, which provoked our criticism. But whether so or not, we are very far from being disposed to "make fun of" any one for the bad spelling, or bad grammar, or for anything else which may be the result of ill fortune or want of opportunity. We yield to no one in sincere respect for good sense and good principles wherever found, without regard to the dress, occupation, or degree of book learning of the man; and we appreciate especially that modesty which goes along with those hardy qualities, and than which "there's nothing more becomes a man." It is the folly which magnifies its little miserable spelling-book learning into "Education," and so takes on wise and virtuous airs, that we hold in contempt. Self-conceit and self-assertion make the stock in trade of a class of people, and when they are blown up like biggest bladders, as a small pin-hole operates on these, so nothing takes down so suddenly such boasters as the simple operation of showing that they cannot even *spell*.

☞ J. W. Griswold, of Wethersfield, Ct., informs the New York *Horticulturist* that he has preserved his trees from the canker worm by piling coal ashes around their trunks.

A Housekeeper's Column.

TURNIP PUDDINGS, &c.—We have frequent inquiries for housekeeping items, recipes for preserving, &c., and shall be glad to have a column or more, in future numbers, devoted to such matters, if we can have it under proper regulation. We would preserve our readers from such messes, yea, such *doses* of cookery, as too often crowd the journals that make profession of giving a great quantity of reading matter for very small pay, (as well they may.) Quality is to be most esteemed, both in reading and eating. If we may claim to have some judgment of the former, and indeed of the latter, so far as the eating goes, of the mystery of that art of preparation called "cookery," we presume not "to know anything as we ought to know it." This is a great confession for an editor; but we *will* say it to you in confidence, reader, that when we have so presumed, years ago, we have been constantly and instantly convicted, at head-quarters, of "Flat burglary." As for instance: "*Turnip Pudding a substitute for apple pie.*" We did not originate this idea; but we endorsed, in fact, adopted it; transplanted it from some of our esteemed contemporaries, into our own little plot of recipes. We like simplicity in such matters. Turnips easily raised, very cheap, a little dash of lemon juice, sweeten to taste, a sprinkling of nutmeg, everybody likes apple pie—admirably adapted to those extended regions of our common country, where fruit culture has been sadly neglected, &c., &c. Now a mere man might have taken this in a serious, common sense way, but a woman is another matter. You know how she *can* laugh when she will; and if two or three of them unite, and every brat in the family joins the chorus, "Tray, Blanche and Sweetheart, little dogs and all," it is easy to see how a man may be barked out of countenance, and even out of his own house.

This is what we had in mind when we spoke of "proper regulations," and as we don't care to become responsible again for this particular department, unless we can get some very knowing lady to take charge of it, we can only hope that the lady readers of *the Farmer* will help us out. Will they so oblige us?

☞ A Scotch writer, in the English *Agricultural Gazette*, says that superphosphate seems to have lost its power with him, and does not do well on his land, though a few years ago it produced marvellous results. Another says guano does no good now, whilst fourteen years ago the smallest dusting showed a marked effect.

Book Table.

OUR EXCHANGES.—It is matter of regret to us that our columns do not offer room for notice of the many valued exchanges of which we are in constant receipt, and which afford us much assistance in our gleanings for the *Farmer*. The list of agricultural and horticultural journals is becoming very large, and many of them are of a high order. Our newspaper exchanges are greatly esteemed, but so numerous that even a catalogue of them would take a large amount of room. Our magazine exchanges we endeavor to give such notice of as their value seems to demand of our limited space.

THE AMERICAN STOCK JOURNAL —This is a valuable publication, indispensable, it would seem, to those who are, to any extent, interested in stock raising. Price $1 per annum. N. P. Boyer & Co., Gum Tree, Penn.

SOUTHERN CULTIVATOR —This is one of our most substantial and esteemed contemporaries. It is full always of good and useful matter, judicious in its editorial conduct, and well sustained by intelligent correspondents. It is published at Athens, Ga. by William N. White. $2 per annum.

SCIENTIFIC JOURNAL.—*A weekly record of scientific and practical information on manufactures, inventions, mechanics, the arts, &c.* We are in receipt of first number of this new publication, of which the title sufficiently indicates its character. It promises to be a valuable addition to the number of our scientific journals. No. 411 Walnut street, Philadelphia. $3 per annum.

BLACKWOOD'S MAGAZINE, from the Leonard Scott Publishing House. Contents of April number: *Elizabeth and Mary; Hemans' Ancient Christianity; The Moral and Political Revolution in Japan; The Army*, part 3; *Manhood Suffrage, and the Ballot in America; A Letter Never Sent*, Brownlow's part 4; *The Ministers and their Measure.* No. 140 Fulton street, New York.

RICHMOND ECLECTIC for May, (April number not received). Contents of this number, from the leading English magazines, *Isaac Taylor; The Tower and its Tenants; Secret Writing*, Richard Whately, D. D.; *The Innermost Room; French Society under the Directory; Sketches of the English Bench and Bar; The Metaphors of St. Paul; Music; The Expression of Character; Science and Art; Miscellanies from Foreign Magazines.*

A Succinct Exposition of the Industrial Resources and Agricultural Advantages of the State of Maryland.

We are indebted to Professor Higgins, the author, for the pleasure of reading this valuable and very interesting exposition, twenty thousand copies of which have been printed for distribution by order of the General Assembly. It will prove, we hope, as attractive to outsiders as it is gratifying to those whose happy lot is cast within the borders of Maryland. We confess to a refreshment of our love for the good old commonwealth, as we reconsider and recount with the author the blessings and comforts that lie openly about us, and the undeveloped wealth and resources yet to be realized. We hope this work will be read by all good people outside, who want a good home and good company, and by all good men in Maryland, that they may better appreciate their own, and entertain again no thought of far off places to rest in, lest that be said of them, which was said by Solomon the wise, "the eyes of the fool are in the ends of the earth." Hold out the hand of fellowship to all who would be of us, and let them have what we may well spare, but let every Marylander "stand his ground" and fight out the present troubles "on this line." And so we say of Virginians, and Carolinians and all true men of the South.

It is not pleasant to be called on to say of the mechanical execution of this document, that it is very disgraceful to the State. Bad paper, worse printing, and such a marring of good English by typographical errors, as no respectable printer could afford to do on his own account. We are in frequent receipt of public documents from other States, and should be very glad to return the compliment in kind, but should be ashamed to send such work as this away from home.

THE AMERICAN FRUIT CULTURIST.—Containing practical directions for the propagation and culture of fruit trees in the nursery, orchard, and garden. This is a new edition, revised by the author, and brought up to the present condition of the science of fruit culture, of the always valuable work of J. J. Thomas, fully illustrated, and tastefully gotten out by the publishers, Wm. Wood & Co., 61 Walker street, New York. Price $3.00.

ELEVENTH ANNUAL REPORT OF THE SECRETARY OF THE MAINE BOARD OF AGRICULTURE, 1866.—We are indebted to S. L. Goodale, Esq., the author, for this report. It is full of substantial, useful matter, handsomely illustrated, printed well, on white, smooth paper, and issued in such style as becomes a public document.

SOUTHERN FARMER.—This is a new candidate for favor, which we take pleasure in commending to the notice and the friendly offices of all who take an interest in Southern agriculture. It is a handsomely illustrated monthly of sixteen pages, quarto, devoted to the interests of the farmer, fruit grower, gardener, stock raiser, inventor, manufacturer and housekeeper. It is published at Memphis, Tenn., and edited by Dr. M. W. Phillips, formerly of Mississippi. Dr. Phillips is well known among agriculturalists as a very intelligent and experienced writer on rural affairs. In his prospectus he says: "Having labored for the past thirty years for the promotion of the agricultural interests of the country, without price and without pay, and the results of the war having swept away everything I possessed—land and laborers—I have, at the urgent solicitations of friends, commenced the publication of the *Southern Farmer*, at Memphis. I have engaged the ablest pens in the South to assist me, and am determined to make the Farmer a blessing to the South, in this hour of her distress and need." We wish him all success, and are sure he will deserve it. Price $2 per annum.

AMERICAN POMOLOGY—*Apples—By Dr. John A. Warder, President Ohio Pomological Society; Vice-President American Pomological Society, &c.* 293 *Illustrations.*—To pomologists, a work by Dr. Warder will need no commendation. Though a citizen of Ohio, he is so sure to be at any pomological gathering, be it East or West, that the whole country claims him, and if any one has a right to entitle his work *American* Pomology it is certainly Dr. Warder. The present is the first installment of a work intended to cover the whole ground. In it the author has attempted the difficult task of bringing apples into something like order.

Fruit growers will welcome this book as a valuable and long wished for addition to pomological literature, and it will be found equally useful to the novice and the experienced orchardist. The work has 293 illustrations, is printed on good paper, and well bound. Sent post-paid, price $3.00. New York: Orange Judd & Co., 41 Park Row.

FARM AND FIRESIDE.—Conspicuous among new enterprises in rural literature is the *Field and Fireside*, published at Philadelphia. It is a handsomely printed and ably conducted weekly, published by S. S. Foss. Price $2.

☞A Herkimer county, N. Y., dairyman estimates that 45 cows require 100 tons of hay to winter them through.

"Department of Labor and Agriculture."

Major Giddings, of Anne Arundel Co., offered recently, in the State Constitutional Convention, an order looking to the organization of a new branch of the Government, under the above title. From an able speech in support of the order, which we find in the *Maryland Republican*, we make the following extract on the subject of Labour, regretting that our limits forbid us to give the whole of it:

"Older governments than ours—I will not say better—have found it wise and necessary to organize departments of labor for the mutual benefit of the employers and the employed, and for the augmentation of their national wealth. I don't know whether anything of the kind has ever been constitutionally established in any of the States of this Union; but it has seemed to me, from the brief reflection I have given the matter, that such a branch of the government is now much required for the development of the former slave States, and for their early restoration to prosperity. And no one of them is in a a better condition to successfully initiate it than Maryland. The great agricultural interest of those States is now languishing, not from the want of high prices, but for the want of labor. It is difficult to tell what would have been the condition of our farmers if they had been compelled to submit to low prices, in addition to the many trials they have encountered since the war. Thanks to a kind Providence, we of Maryland have not suffered the horrors of famine as have our unfortunate Southern brethren, but as far as my observation extends the area of land under cultivation has become annually less since the act of emancipation.

The great, the paramount want of our State to-day is labor; labor in its many fertile and deserted fields. The makers of the present Constitution, at one fell blow, and contrary to the will of a majority of our people, deprived us of thousands of happy and contented laborers. It was a measure which—as was remarked by the late and much lamented statesman, Judge Chambers, in his protest against the adoption of the 24th article of the Bill of Rights—'inflicted serious injury and suffering on many of them, and was iniquitous and unjust in the extreme to the master.'

It was a paralyzing blow to inflict so suddenly upon the industry of a State; such as madmen only in their demoniac phrenzy would strike. It left many of our people penniless, and thousands with scarcely the means to support their families

and pay the taxes on their lands. For the last two or three years our farmers have struggled with all the difficulties and embarrassments consequent upon so violent a revolution, and so discouraging is the prospect before them at present, that there are but few, in my section, at least, who do not wish to sell or rent their estates.

Some have been anxiously expecting that influx of population from other States, promised us by the President of the last Convention in his farewell address to that body, and which was to take the place of the labor they had destroyed. But they will wait and watch for it in vain. The North and the West have abundant and profitable employment for all their labor and their capital. There is scarcely a State in this Union which has yet seen more than the beginning of the development of its resources.

I repeat that we want in Maryland at present, more than all thinks, labor—abundant and reliable white labor. And we should not wait for it to come to us, but we should seek for it in the populous portions of the world. Individual effort can accomplish but little in this matter. Nor will it be the business of a day to restore to Maryland her lost labor. It may require years of patient and systematic toil to rebuild what was so easily and rashly destroyed.

Our farmers do not expect compensation for their slaves; and their representatives in this body will, I believe, be found willing to extend and guarantee to their former servants, all the rights necessarily incident to their present condition. But it appears only just and reasonable, as the last Convention deprived them of their labor, that the new Constitution should contain some provision to aid them in recovering what is so much needed for their individual prosperity and the general welfare.

Can we not, then, organize a department of the government whose chief business it shall be to so speedily increase the labor of the State, as to make our lands in the future, more valuable than our land and slaves combined, have been in the past? That is the question to which my resolution invokes the consideration of this Convention. We shall have to rebuild, stone by stone, and arch by arch, the fallen temple of our industry. It is a great work, and cannot be begun too soon; once commenced, it should be pressed steadily to completion, and not left to suffer, as great undertakings often do, from legislative neglect, or the want of private enterprise.

The productive labor of a State is the main pillar of its greatness. Let us lay the foundation for it, and let it be of such materials that neither time nor future revolutions shall again so utterly prostrate it."

For the "American Farmer."

Stalling Cattle.

Messrs. Editors: Reading the article on stalling cattle in your last, has tempted me to make a few remarks on this *highly* important subject, although with the risk to trespass on your valuable space. All of us farmers acknowledge that *manure* is the "conditio sine qua non" of farming. It is so more now than ever, as we have lost our reliable labor, and now are restricted to labor as *uncertain* as life. We have now to work a smaller area and do every thing to obtain the largest possible produce. This object can only be reached by *manure* and *rational* farming. To obtain the amount of manure required on a farm, there is no *easier* and *cheaper* way than to stall the stock all year round. Although *S. B. F.* doubts that one cow can be soiled with one acre and a half, still I can assure him, by my experience for years, that it can be done. At the beginning of adopting this method, if your soil is not in tolerable good condition, it may pinch you a little, but after a year or two, you will hardly require the above stated area. It is also a *positive* fact, that a cow fed in this way, will produce manure for one acre, per annum, provided you have the required amount of straw, or other material for litter. Confinement is not injurious to the cattle, but if desired, they can be fed in summer under a shed and have a good sized yard to run in. This yard ought always to be provided with plenty of litter. By feeding them this way, the labor of cleaning the stable is saved. The main obstacle in general by feeding cattle on the stall in summer is, to obtain the required green forage early enough in spring. In northern Europe they often have to turn their cattle out in the beginning of spring, as vegetation starts late, and dry feed in May would diminish the production of milk. But here, in our climate, we can easily obtain it by sowing some rye in August and some in September. This will provide you with green forage from the end of April until the clover is fit for cutting. When you commence feeding the rye, great care has to be taken. The best way is to mix it half with hay and then diminish the quantity of hay gradually. But it is always advisable to feed hay at night to prevent scouring. In case you mow the required quantity of feed for the day at once, precaution should be taken not to mow it with the dew on, as it then is apt to heat in the pile. *S. B. F's* remarks about winter feeding can only be fully endorsed by any practical farmer; surely the best market for hay and straw is at home. By trying several different ways of feeding, I

have found that from six to eight quarts of cornmeal, with half a bushel of brewers' grain, or its equivalent, will keep up a full flow of milk and fatten a cow. As I have the grain convenient, and labor here is very precarious, I prefer it to turnips, although, under reverse circumstances, I should prefer the turnips. In the fall, when green feed gets less nutritious, it is a very good plan to turn the cattle on the stubble, besides feeding them at night. L. A. HANSEN.

Clifton, Fairfax Co., Va., May, 1867.

Improvement in Farming.

Timothy Titcomb, in his Rural Life, says—"The improvements made in farming and farming implements have not been made by farmers themselves, but by outsiders—mechanics and men of science—who have marvelled at the brainless stupidity which toiled on in its old track of unreasoning routine, and looked with suspicion and discouragement upon innovations. The reason why the farmer has not been foremost in improving the instruments and methods of his own business is, that his mind has been unfitted for improvement by the excessive labors of his body. A man whose whole vital energy is directed to the support of muscle, has, of course, none to direct to the support of thought. A man whose strength is habitually exhausted by labor, becomes, at length, incapable of mental exertion; and I cannot help feeling that half the farmers in the country establish insuperable obstacles to their own improvement by their excessive toil. They are nothing more than the living machines of a calling which so far exhausts their vitality that they have neither disposition nor power to improve either themselves or their calling. * * * * There is no doubt about the fact that a life whose whole energies are expended in hard, bodily labor is such a life as God never intended man should live.

"I am perfectly aware that I am not revealing pleasant truths. We are much in the habit of glorifying rural life, and praising the intelligence and virtue of rural populations; and if they believe us they cannot receive this with pleasure. But the question which most interests them is not whether these statements are true. Is the philosophy sound? Does a severe and constant tax on the muscular system repress mental development and tend to make life hard and homely and unattractive? Is this the kind of life generally which the American farmer leads? Is not the American farmer, generally, a man who has sacrificed a free and full mental development, and all his finer sensibilities and affections, and a generous and genial family and social life, and the dignities and tasteful proprieties of a well-appointed home, to the support of his muscles? There are instances of a better life than this among farmers, and I should not have written this if those instances had not proved that this everlasting devotion to labor is unnecessary. There are farmers who prosper in their calling and do not become stolid—whose homes are the abodes of refinement, whose watchword is improvement, and whose aim is to elevate their calling. If there is a man on the earth whom I honestly honor, it is a farmer who has broken away from his slavery to labor, and applied his mind to his soil.

"Mind must be the emancipator of the farmer. Science, intelligence, machinery—these must liberate the bondman of the soil from his long slavery. When I look back and see what has been done for farming within my brief memory, I am full of hope for the future. The plough, under the hand of science, has become a new instrument. The horse now hoes the corn, mows the grass, rakes the hay, reaps, threshes, and winnows the wheat; and every year adds new machinery to the farmers stock, to supersede the clumsy implements which once bound him to his hard and never ending toil. When a farmer begins to use machinery and to study the processes of other men, and to apply his mind to farming so far as he can make it take the place of muscle, then he illuminates his calling with a new light, and lifts himself into the dignity of a man."

SEEDS FOR GRATUITOUS DISTRIBUTION.—Five large packages of assorted garden seeds were received here, per express, on Friday last, from John T. Ford, Esq., of the Holliday street Theatre, Baltimore, with a request that the same be distributed amongst those whose circumstanees should render their acceptance convenient. The fact of their arrival was made public by our fellow townsman, Major Mask, to whom they were consigned, and with characteristic liberality he has distributed them to all alike who stood in their need, "without distinction of race or color."—*Moorefield (Va.) Advertiser.*

ONIONS AND INSECTS.—The *Scottish Farmer*, in alluding to the fact that most insects have a strong repugnance to onions, suggests that a wash of onion juice, or of water in which onions have been bruised, might prove useful as a wash for plants infested with insects.

Portable Manures in England.

Artificial manures are valuable in another point of view. You are not always obliged to feed your turnips off upon the land, but you may want them, in some instances, at home. If, in consequence of this, your barley does not, in the spring, look as satisfactory as it ought, you can now improve it, whereas before you was obliged to leave it to its fate. A little guano or nitrate of soda and salt—about three quarters of a hundred weight of either guano or nitrate of soda, and four hundred weight of common salt—for either wheat or barley looking badly in the spring, will produce an immediate effect. You will find, particularly in hilly districts, that a great breadth of land not hitherto cultivated for turnips, or cultivated with difficulty, in consequence of the expense of carrying farm yard dung, can be brought by these artificial manures into a high state of fertility; and I need not tell you that if you get twenty tons of turnips per acre, your cultivation for the next four years will be pretty well established.

In Wiltshire and other places in the south, the introduction of these portable manures have been the actual salvation of the country. In that district farmers, with whom I am well acquainted, have been paying high rents for low lying lands—smaller rents, it is true, for the high lands, but between the two the rental has been considerable. The hills there are rather more abrupt than the ordinary run of hills in this neighborhood, and it was found extremely difficult, indeed, almost impossible, to cultivate them; but since the introduction of portable manures, by the application of guano, super-phosphate, or manures of the same kind, to the hill land, agriculturists have been able to obtain a great quantity of turnips, with which they have fed an increased stock of sheep. I have not heard any grumbling from them for the last three or four years; they have been doing well by their stock, and if you, gentlemen, can grow more food, and keep a larger number of stock—if you can manage to keep an increased quantity of sheep, and sell them at good prices, and also dispose of your wool at 17d. or 18d. per pound, I think the cry we have had about the fall of British agriculture will prove to have been perfectly unfounded.

I have, I believe, given you a pretty clear notion of what are the best manures for these crops. I may say, generally, that for wheat those manures are the best which contain ammonia or nitrogen, with a certain amount of phosphates. They must be applied carefully, because there is a liability to throw down the wheat, and in order to prevent that I must recommend you to use salt. Salt is not a thing which shows itself conspicuously in the production of a great luxuriance, but rather in giving strength to the stem of the wheat. In Lincolnshire you will rarely find the wheat falling on the salt marshes. Two hundred weight of guano and four hundred weight of salt is a good dressing for an acre of wheat. With respect to grass land, according to the experiments of Professor Kuhlmann, the amount of grass produced on any given acre is in direct proportion to the amount of ammonia used. In reference to grass and clover, you have not much cause to fear excessive luxuriance.

The more you apply of those manures which contain nitrogen, the greater will be the vegetation. Prof. Kuhlmann applied gas-water, nitrate of soda, ammonia, dissolved bones, and a great many other things, to grass land; and he found, as the result of his experiments, having ascertained previously by analysis the amount of nitrogen in these materials, that the increase in the crop was precisely in proportion to the amount of nitrogen in the manure. He tried the experiment for two or three years. He took not only the first crop but the second; he cut them, and found an increase, relatively, in the second as in the first. Having had experiments tried on the Downs in Dorsetshire, with ammoniacal manures, I have myself found the production of grass largely increased thereby. I mention these things because you will have to turn your attention a little more to science than you have done, so as to ascertain the nature of the manures which you are using.

Now let me say a word, in conclusion, with respect to the adulteration of manures. Good guano ought to contain sixteen or seventeen per cent. of ammonia, and from twenty-five to thirty per cent. of phosphate of lime. I am speaking of Peruvian guano. There are many other guanos brought into this country, and I will just tell you what they are selling at. Guanos, of which I have had hundreds under analysis, have been selling in the market at £8 and £9 per ton; but to you they are not worth a third of that amount. I wish to warn you, that if you procure guano from any but the best sources, it is a thousand to one but that you are cheated, as many persons, I fear, have learned to their cost.

Adulterations of guano are carried on to an extraordinary extent. The other day I happened to be in Newcastle, and I can assure you that there is a regular establishment there for the purpose of sending out systematically adulterated articles to the extent of thousands of tons. They are sent off quietly, to prevent the trickery from becoming known, and are of course flavored

with a little genuine guano. The adulterated article is bought up by those farmers who like to purchase *a little under market price*, and who are, in consequence, shamefully cheated. Every farmer, in fact, who tries to buy *cheap manure*, is sure to be deceived; because, if he *will* have it cheap, people will be found to make it at his price, and he will have to pay the cost of mixing, and probably fifty per cent. besides. If manures are worth using at all, they are worth a proper price. Manures of the lowest price are the least valuable to the farmer. If he could obtain a manure intrinsically worth £50 a ton, it would be proportionately more valuable to him than Peruvian guano, because of the saving of carriage, and other facilities arising from its small bulk. You cannot, therefore, be too careful in purchasing these artificial manures.

Let me advise you, when purchasing the article, to deal with none but men of established character and integrity. Do not try to buy everything cheap, for it is certain that you will be cheated if you do. The quantity of adulterated guano annually made up, cannot, I think, be less than 20,000 tons, and I estimate the lowest amount of which the farmer will thus be defrauded at £100,000 ($500,000) per annum.

PROF. NESBIT.

Importance of Bulk in Feed.

Although the presence of a sufficient quantity of nutritive matters in the feed is naturally the most fundamental matter for consideration, its bulk is scarcely less important. The function of digestion requires that the feed shall properly fill the stomach, and however large the supply of nutritive matters may be, their effect is imperfectly brought about if the feed be too small in bulk; and it actually becomes more valuable if diluted with woody fibre, or some other inert substance. On the other hand, if feed be too bulky, the sense of repletion causes the animal to cease eating long before it has obtained a sufficient supply of nutritive matter. It is most necessary, therefore, to study the bulk of the feed, and to consider how to mix the different substances in such a manner as to adjust the proportions of nutritive matter to their bulk. If we examine the nature of the mixed feeds most in vogue among feeders, it will most generally be found that very bulky feed is combined with another of opposite properties. Hence turnips, the most bulky of all kinds of feed, are used along with oil-cake or bone meal; and if, from any circumstance, it becomes necessary to replace a large amount of turnips by the latter substance, the deficient bulk must be replaced by hay or straw.—*Prof. Anderson.*

Clover and its Substitutes.

Clover, Sainfoin, Dutch Clover, Trefoil and Rye Grass—Alsike and Perennial Red Clover—Feeding as compared with Mowing—Curing Artificial Grasses—Causes of Clover Failures—the Season.

NORFOLK, ENGLAND, March 14, '67.

Whether it be owing to too frequent repetition, or to some peculiarity of our soil and climate, the unpleasant fact remains, we cannot calculate with any degree of certainty on the red clover plant standing. We have therefore been driven on the principle that "half a loaf is better than no bread," to sow, with a peck an acre of red clover, a like quantity of perennial rye grass. The mixture, (if there is any clover left,) makes excellent hay. It used to be a common practice to sow alternately, every four years, with this mixture, a peck per acre each of trefoil and rye grass, and four pounds per acre of white Dutch clover—the latter with a view to after feed—as trefoil dies after being mown. Of late years, however, sainfoin has come largely into use. A chalk subsoil is best adapted to its growth, but it is now tried, with varying success, on soils where no chalk exists. The roots run deeper down than the clover plant, consequently our dry summers do not affect it. As green food for sheep, it is a long way the best we know of. The hay made from it is eaten with avidity by horses, cattle and sheep. The quantity of seed, in husk per acre, is three to four bushels, drilled across the rows of barley. The seed seldom costs less than a dollar a bushel, which makes it rather expensive for the year's ley. As a preparation for the succeeding wheat crop, we place sanfoin 1st, clover 2d, trefoil and Dutch clover 3d, rye grass last. Indeed, rye grass being of the same family as wheat, would not be cultivated but for the reason I have indicated.

Where the regular four course rotation is not followed, sainfoin may be allowed to lie five or six years; it usually bears a better crop the second year than the first. For soiling, it is cut the first time in early May, and may be mown twice afterwards; for hay, it is cut the latter end of the same month, or as soon as it is well in flower. The after-growth comes in handily for the newly weaned lambs.

Alsike clover does not find much favor. If sown at all, it is as a substitute for Dutch clover. In the trefoil mixture, cow grass, (perennial red clover,) does not lose plant to the extent that the common red clover does, and it will bear sheep feeding up to a late period in spring, but the hay made from it is coarse in quality.

The exigencies of a flock farmer in the spring often render it imperative to feed one-half his clover or other artificial grass, instead of mowing for hay. Notwithstanding that the land by this means gets a good deal of manure from the sheep's "tothe," the best crop of wheat is generally grown after mowing—probably owing to the benefit derived from the land being shaded from the midsummer sun. If this is so, the difference between land mown and fed, should be more perceptible with you than with us.

We commence cutting artificial grasses for hay rather before the bloom is fully out—cow grass as soon as the first few heads appear. Should the weather be favorable, the swathes are turned once or twice, accordingly as the crop is light or heavy. When about half dried, the hay is gathered into large "cocks," and in that state remains until it can be stacked, without fear of overheating.

Cocking hay involves a heavy outlay for labor, and if the weather can be depended on may be dispensed with, and the hay secured in a stack not over four yards wide at the base. Many good managers pursue this plan. Nobody here ever thinks of putting hay in a barn, as they do on the (European) continent.

Apropos of clover—I find a young farmer in *Co. Gent.*, Feb. 21., quoting Baron Liebig to prove that clover will, in course of time, reduce the fertile soils to barren wastes. Surely Liebig's theory must have reference only to the exhaustion in the soil of the particular food required by the clover plant itself. That it does not produce general exhaustion of the soil, our Norfolk farms, where it has been cultivated time out of mind, furnish a practical proof.

I believe I am somewhat singular in my opinion, that the failure of the clover plant is due to climatic influences more than to any other cause whatsoever; otherwise how comes it that in certain humid seasons, of which the present is a remarkable instance, we get and retain a full plant, while in seasons of an opposite character, we lose the plant altogether? How comes it that the mysterious (and hitherto undiscovered) food, assumed to be essential to the growth of this particular plant, is present one year and absent the next.—A Norfolk Farmer *in the Country Gentleman.*

Soot.—Twelve quarts of soot in a hogshead of water will make a powerful liquid manure, which will improve the growth of flowers, garden vegetables, or root crops. In either a liquid or solid state it makes an excellent top-dressing for grass or cereal crops.—*Practical Farmer.*

Seeding to Clover.

Messrs. Editors: In answer to "J. G., New Jersey," it may be stated that clover seed is often sown on wheat, for which clover has been plowed under, with satisfactory results, in Western New York. It is the customary practice to seed with wheat, and whenever this grain is sown on a clover ley, it is again followed with clover. But in this section wheat is not so often sown on a good clover ley as it should be. It is more customary to let the land lie until the clover is run out, and the time is past when the most benefit may be secured; besides it is getting much too common to sow wheat after spring crops.

But in the northern part of Genesee county, and particularly what is called the "oak openings," plowing under clover—either with or without lightly pasturing—for wheat, has been largely practiced with decided advantage. In such cases the land in wheat is always seeded again to clover, the "two course rotation of clover and wheat" having been followed many years. In this way a great deal of most excellent wheat has been grown.

But it is found that it is not best to follow this course too long. When wheat is sown after clover every other year, fifteen years or more, it begins to fail, and show that a change is needed. This is not because the land is not rich, as it is found that heavy crops of corn and barley can be grown on such land, but because the soil needs resting for wheat. When corn and other crops have been grown, and the land is again sown to wheat, good crops are secured. This not only shows that a rotation of crops is necessary to produce the best results, but there should be some variety in the crops adopted—that although land may be made very rich by plowing under so much clover, yet, to produce the best returns, nature needs more change—needs a greater variety of crops to secure the greatest advantage from so large an amount of fertilizing matter. This is further shown by the fact that last year large crops of barley were grown on the "oak openings," many large fields yielding, as I am told, from forty to fifty bushels per acre.

But there is one point of some importance to those that fear the land may become "clover sick," and that is, that wheat fails or shows a need of a change before clover. Not only is the land made rich, and a succession of heavy crops of wheat grown, but when wheat begins to show need of a change, large crops of other grain are grown, which are again followed with good wheat, and all mainly or wholly secured by frequent seeding to clover, which still continues to do well.

True, this is done on good land that is well adapted to clover; but it is not without value as proof that on all grain soils, and especially those suited to winter wheat—clover, if judiciously used in connection with barn yard manure, and a good rotation—will make and keep land rich and productive. It is also valuable as another proof of the advantage of frequent seeding to clover. And one object in writing at this time, is again to urge farmers to seed to clover with all sown grain, and especially winter wheat and rye, as experience and observation each year confirms the opinion that in no other way can the same improvement of the soil be as easily or cheaply secured.

But I do not recommend farmers to plow under a heavy crop of clover every other year, for wheat. Not but heavy crops of wheat can be profitably grown in this way. But I have no doubt that a rotation in which corn is planted on a two-year clover sod, and followed by some spring crop with which clover can be sown, and this clover, after laying one year, is followed with wheat, is better for the land and more profit to the owner. In this way the land may be in clover about half of the time, and if the crop is good, it may be cut for hay. This hay, with cornstalks and straw, if all are well saved, and judiciously fed, with a suitable proportion of grain, will make sufficient manure, if properly saved and applied in connection with plowing under a good clover ley every two or three years, to make the land rich and productive. I grow clover and other crops in this way, and have several times sown clover seed on wheat that was sown on a good clover ley, and shall do so again this spring.—F., *Orleans county, N. Y., in Country Gentleman.*

☞Mr. Kendall, formerly of the N. Orleans *Picayune*, but for years a wool grower of Texas, writes to the *Rural New Yorker*: "On the 13th of March, after a warm growing spell, the worst sleet storm ever experienced in this State set in; away went the grass; the ewes had no milk, and the consequence you may easily judge. I hoped to raise 1800 lambs; but if 500 rub through, I shall be satisfied. The weather up to April 7, has continued cold, raw and backward."

☞A farmer in Iowa destroyed the grub-worms that were destroying his corn, by catching a lot of moles and putting them into the corn field. The moles may be caught by the use of cow's horns with the pith out.

Raising Calves by Hand.

For the first ten days the young calf is allowed the milk of the cow exclusively. The milk of the new calved cow, as every dairyman knows, is not fit during the first week for dairy purposes, and is the only suitable nourishment for the delicate digestive organs of its young. For a few days after this period, about two or three quarts of milk at a meal should still be given, gradually adding some other food in the shape of gruel, and at the same time diluting the milk with water, so as to obtain the requisite quantity of fluid. Some recommend whey, where it can be procured. The gruel is made with a mixture of linseed meal or oil cake powdered fine, and meal of various grains, barley, oats, and a little wheat flour. The proportions recommended by Mr. Henry Ruck, in a paper read by him at one of the meetings of the Cirencester Farmers' Club, England, are as follows: Into a six gallon bucket pour two gallons of scalding water, stir into this seven pounds of ground linseed cake; then add two gallons of hay tea, which should be fresh and sweet; next add seven pounds of mixed meal; add sufficient cold water to fill the bucket, and well mix together. Two quarts of this gruel, diluted with two quarts of cold water, will be about the right quantity, and of the right temperature, for one calf at one meal. The food should be given at regular hours, and twice a day, morning and evening, will be found sufficient. The hay tea, which seems to be an excellent preparation, is made every morning by filling a small tub with good hay, and pouring on boiling water; this should be used in the evening, fresh scalding water added, covered down and used the following morning. After the first fortnight, when the calf begins to chew the cud, the chief difficulty and danger are over. As the calf begins to eat, the quantity of gruel should be gradually diminished. Solid food should be placed before them, to train and encourage them to eat, which they will very soon learn to do. The best material for this purpose is good sweet hay, with a small supply of crushed corn and crushed oats. In addition to this, mangel wurzel will be found serviceable, and is very much relished by the young animals. Vetches also, as soon as they can be had, are most useful.—*Canada Farmer.*

☞On a charge of destroying fruit, the city council of Madison, Ind., have passed an ordinance excluding honey bees from the limits of the corporation—guilty or not guilty.

Plant Food.

The intrinsic value of all articles of food is measured by the proportion of nitrogen contained in them. If we take wheat as the standard of comparison, and call the proportion of nitrogen in it 100, corn will be 40, potatoes 30, beans 250, beef 300, cheese 350, &c. The actual value of these, as articles of food, will maintain about these proportions; and with a proper allowance for the variations produced by the operation of the law of supply and demand, these figures will very nearly represent the commercial value of these articles for a series of years. But while nitrogen is the most valuable element of a crop, it is at the same time the most difficult to obtain. This may sound strange to persons who remember that plants grow in an atmosphere four-fifths of which is nitrogen. But this is simple, uncombined nitrogen, and plants cannot use an atom of matter until after it has been subjected to the action of the chemical force.

Food for vegetables must be prepared by the process of chemical combination before it is fit for use. More than half the labor of cultivation in producing farm crops, is devoted to furnishing the ammonia necessary for their vigorous growth; for it is from this compound that plants derive their nitrogen. Porous substances absorb ammonia and retain it, unless the temperature be considerably elevated. To make the soil a good absorbent, the farmer labors to pulverize the earth and make it as fine and porous as possible, and that the ammonia, once absorbed, may not be driven off by the heat of the summer sun, he extends his pulverizing process as deeply as possible.

Animal and vegetable matter containing nitrogen, when decaying, give off the nitrogen in the form of ammonia. From this source the air is constantly supplied with ammonia—to breathing animals an impurity, but to plants an indispensable article of food. This ammonia, floating in the atmosphere, is common property and belongs to the man who catches the largest quantity of it, by making his soil the best absorbent.

Many of the ingredients of soils are valuable only for their absorqent properties. For example, clay does not, in any form, enter into the composition of vegetables, and yet no soil can be highly productive without at least twenty per cent. of clay. It acts, not as food for plants, but as an instrument for collecting and holding moisture and the fertilizing gases. The finer its state of division, the more perfectly it answers this end. Carbon is even a better absorbent of gases than clay. Fresh burnt charcoal, which is nearly pure carbon, will absorb and retain, at low temperatures, as much as ninety volumes of gaseous ammonia. By this expression I mean to say that one cubic foot of carbon will take up and hold ninety cubic feet of ammonia in the form of gas. It also absorbs carbonic acid in the proportion of thirty-five volumes to one, and of other gases in various proportions. Now the vegetable mould, which every good farmer regards as the index of a rich soil, consists chiefly of carbon, and its great value is in its power to absorb and hold ammonia and carbonic acid as a supply of food for growing plants.

The idea commonly entertained by farmers that the black vegetable mould, which is the distinguishing characteristic of all rich soils, is itself the food of plants, is evidently a mistaken one. The food of plants must be presented to them in either a liquid or gaseous form. But carbon, whether in the form of charcoal or of vegetable mould, is not capable of being dissolved in water, or in any other way liquified, and therefore cannot be used by growing plants. Exposed to the air and sunshine, it is slowly oxydized, and thus converted into carbonic acid, it becomes a source of supply for the demands of the growing crops. The importance of vegetable mould as a source of carbonic acid is not to be lightly estimated, yet this is certainly not its chief use. To absorb ammonia from the air, and to retain it, subject to the use of plants, is its true office. A soil consisting of clay and vegetable mould, has the chemical composition, therefore, of the highest absorbent power.

But this is not all that is necessary—a state of fine mechanical division is also an essential quality of a good absorbent, and a compound of clay and vegetable mould is apt to be compacted into a solid mass which the air cannot penetrate, or baked, by the sun, in clods as hard adobes. From forty to sixty per cent. of sand will most effectually remedy this defect, and render the soil easily pulverized and maintained in a state of fine division. Such a soil will always have on hand an ample supply of food for the use of plants, at least so far as the organic elements are concerned, and if the inorganic elements—the alkalis and phosphates—are furnished in proper quantities, we have all the conditions of fertility pertaining to a perfect soil.

But a soil may absorb plant food most perfectly and yet hold the gases but feebly. In the last number of these papers I spoke of the effect of Plaster of Paris as a means of holding ammonia by forming of it an involatile salt. This secures it more effectually than any other method, and but for the high price of plaster, it would soon come into general use. There is an article which

may be used as a substitute for plaster, which is abundant in supply, and will cost but little to procure it. Under the common yellow clay, which, everywhere in Central and Northern Indiana, forms the subsoil, there lies a bed of clay of a dark lead color, very hard and compact. This "blue clay," as it is commonly called, lying at depths varying from ten to twenty-five feet from the surface, is often exposed in the banks and beds of our streams. It owes its peculiar color to a combination of sulphur and iron. Now if this material be thrown up in heaps, so as to expose it to the air, it crumbles down into an ash colored mass. On examining this earth, now, it will be found that the sulphur has combined with the oxygen of the air, and thus been converted into sulphuric acid, (oil of vitrol,) which has united with the lime and iron of the clay, forming sulphates of these bases. This clay, thus prepared, will act as a fertilizer on the same principle that plaster acts. Of course it will require much more per acre than would be required of plaster, as but a small per cent. of it is the sulphates of lime and iron, the mass being clay.

A soil not shaded by any vegetation, or protected by any covering from the direct rays of summer sun, loses its ammonia very rapidly. Naked fallows exhaust a soil more than a summer crop. Much of the fertilizing effect of clover is to be accounted for on this principle; for no crop so completely covers the ground and secures the absorbed ammonia from the exhausting effect of sunshine, as does clover. Every observing farmer has noticed how rapidly an old fence row or a dense brier thicket acquires fertility. Even covering the ground with boards for one season will greatly increase its productiveness the next year. Mulching trees and plants promote their growth, not merely by keeping a constant and uniform supply of moisture, but much more by retaining the absorbed ammonia. —*Dr. R. T. Brown, in Northwestern Farmer.*

☞ The *Prairie Farmer* has not the shadow of a doubt of the ultimate success of the beet sugar enterprise in Illinois and other Western States. About 100,000 lbs. of sugar of an excellent quality has been manufactured in Chatsworth, Ill., the past season, demonstrating that beets grown there are as rich in sugar as those produced in the best sugar districts of the Old World.

☞ The *Prairie Farmer* says that Osage hedging has become the chief mode of enclosure on the prairie farms.

Jersey Cows.

Mr. James Thompson, of Nantucket, has an article in the *Massachusetts Ploughman*, of the 9th inst., mainly devoted to the discussion of the merits of Jersey cows. He is a thorough believer in the valuable qualities of this breed, but does not claim for it superior excellence in all respects. After an experience of twelve years he was led to give up the raising of cows from native stock, and in 1863 he purchased three Jerseys and three Ayrshires. He found that Grade Ayrshires fattened and dried up in milk, early, and he soon sold them to the butcher. His full blooded Ayrshires came in with a large flow of milk, but when gestation commenced their flow decreased and they began to fatten; this led to the shortening of their feed, which again decreased the flow of milk, so that on the whole they did not yield more than an average. He was thus led to sell off all but his Jerseys. After four years' trial he is well satisfied of their superior qualities for milk or butter, and that for beef they fatten rapidly when dried off. He also maintains that they are either natives or Ayrshires. Mr. Thompson's cows are of pretty good size, weighing from 800 to 1000 pounds. Many persons who own Jersey cows prefer the small sized and delicately shaped to the larger animals, which we believe a mistake. And it also seems to us that one reason why Jerseys have not been more generally appreciated in this country, is to be found in the fact that sufficient pains has not been taken in the rearing of the calf, in the crossing of families and in the feeding of the cows. To half starve a calf, to drive it when it is not over a year old, and finally to breed in-and-in, is to take the surest method of dwarfing and ruining any breed of cattle. This is almost universally done with Jerseys. Bring the calves up by hand, teaching them when not two days old to drink warmed milk from a pan; give them skimmed milk, that they may grow, not new milk that they may fatten; and after a while a thickening of linseed meal, scalded; keep them in a warm place in winter, and their growth will be astonishing. Mr. Thompson gives the net product of five cows as follows:

996 3-16 lbs. butter at 50c	$453 09
Milk sold for cash	116 76
One bull calf sold	25 00
One bull calf on hand	25 00
One heifer on hand	100 00
6300 quarts skimmed milk to the pigs at 2c	126 00
	$855 35
Cost of keeping 5 cows at $80 each	400 00
	$455 35

Sunday Reading.

The rising of the sun is known by the shining beams; the fire is known by its burning; the life of the body is known by its moving; even so certainly is the presence of God's spirit known by the shining light of a holy conversation; even so the purging fire of grace is known by the burning zeal against sin, and a fervent desire to keep God's commandments; even so certainly the life and liveliness of faith is known by the good motives of the heart, by the bestirring of all the powers both of the soul and body, to do whatsoever God wills us to be doing, as soon as we once know He would have us do it. He, that hath this evidence, hath a bulwark against despair, and may dare the devil to his face; he, that hath this, hath the broad seal of eternal life, and such a man shall live forever.

There is a particular tenderness due to persons under any recent affliction, not only that we may not seem to "vex them, whom God hath wounded, and persecute them, whom He hath afflicted;" but because men are more susceptible of resentment, in proportion to the greatness of their distress. Their adversity will embitter their spirit, and discolor every object. Handle then gently "a wounded mind," as you would do a wounded body, with all the tenderness you can. It will not bear too rough a hand. Remember that a good natured man cannot give pain, without feeling in some measure the pain he gives.

By six works of mercy Christ wrought miracles upon the body, and by these six also doth He work miracles upon the soul. Blindness is ignorance and error; Lameness is infirmity and waywardness of the will; Leprosy is concupiscence of the flesh; Deafness is obduration of the heart; the Separation of grace from the soul is death; Poverty is the defect, or want, of the knowledge of God, the power to receive the gospel.

Our light is like a candle; every *wind* of vain doctrine blows it out, or spends the wax, or makes the light tremulous; but the lights of heaven are fixed, and bright, and shine forever.

A tender conscience is an inestimable blessing; that is, a conscience not only quick to discern what is evil, but instantly to shun it, as the eyelid closes itself against a *mote*.

All the succession of time, all the changes in nature, all the varieties of light and darkness, the thousand thousand accidents in the world, and every contingency to every man and every creature, doth preach our funeral sermon, and calls us to look how the old sexton, Time, throws up the earth, and digs a grave, where we may lay our sins or our sorrows, and sow our bodies, till they rise again in a fair, or an intolerable eternity.

Our words are the commentaries on our wills; for, when we speak we make, as it were, a dissection of our own hearts, and read an anatomy lecture upon ourselves. Our wanton talk discovers a stew in our heart; when our words are swords, our hearts are a slaughter house; when we bear false witness, that is the mint; when we worship Mammon, that is the temple. The heart is the shop and workhouse of all evil.

Faith is the source; charity, that is, the whole christian life, is the stream from it. It is quite childish to talk of faith being imperfect without charity; as wisely might you say that a fire, however bright and strong, was imperfect without heat; or that the sun, however cloudless, is imperfect without beams. The true answer would be; it is not faith, but utter reprobate faithlessness.

A man is no greater than what he is in the eye of God; and the estimation, which God hath of us, is not for being born in a *palace*, but for being righteous and just: what an error is it then to value ourselves more than for our human birth, by which we are made sinners, than for our Divine birth, by which we are made just.

Men are not made truly righteous, as Aristotle supposes, by performing certain actions, which are externally good—for they may be still counterfeit characters; but men must have righteous principles in the first place, and then they will not fail to perform righteous actions. God first respects Abel, and then his offering.

In extemporary prayer, what men most admire God least regardeth, namely, the volubility of the tongue. Herein a Tertullus may equal, yea exceed, St. Paul himself, whose speech was but mean. (Acts xxiv; 2 Cor. x, 10.) O! it is the heart keeping time and tune with the voice, which God listeneth unto.

☞So great is the demand for the Osage plant for fencing purposes, that the price has recently risen from two and a half to four dollars per thousand, in the State of Illinois.

☞A cargo of 46,000 bushels of California wheat, lately arrived at Philadelphia, nets the owners $50,000.

Baltimore Markets, May 20, 1867.

COFFEE.—Rio, 16½a18½ cts. gold, according to quality. Laguayra ——, and Java ——.

COTTON.—We quote prices as follows, viz:

Grades.	*Upland.*	*Gulf.*
Ordinary	23	—
Good do	24	—
Low Middling	26	—
Middling	27	—

FERTILIZERS.—Peruvian Guano $80; Patapsco Co's $60 Reese & Co's. Soluble Pacific Guano, $65; Flour of Bone $60; G. Ober's (Kettlewells) AA Manipulated, $70; A do. $60; Ammoniated Alkaline Phosphate, $55; Alkaline Phos. $45; Baltimore City Company's Fertilizer, $40; do., Flour of Bone, $60; do., Ground Bone, $45; do., Poudrette, $20; Baugh's Raw-bone Phosphate, $56; Maryland Powder of Bone, $50; Andrew Coe's Super-Phosphate of Lime, $60; —all per ton of 2,000 lbs.; Pure Ground Plaster, $13.50a $14.00 per ton, or $2 50 per bbl. Shell Lime, slacked, 6c., unslacked, 10c. per bushel, at kilns.

FISH.—*Mackerel.*—No. 1, $19a21; No. 2, $16 50a18.00; No. 3, $14. *Herrings*—Labrador, $5.50a6.50; Potomac and Susquehna, ——; Codfish, 5a5½ cts. per lb.

FLOUR.—Howard Street Super and Cut Extra, $11.00a $12.00; Family, $16.00a16.50; City Mills Super, $11.00a 11.50; Baltimore Family, $18.00.

Rye Flour and Corn Meal.—Rye Flour, new, $8.75a 9.25; Corn Meal, $5.75a6.00.

GRAIN.—*Wheat.*—Good to prime Red, $3.15a3.50; White, $3.40a$3.50. Market dull.

Rye.—$1.40a$1.50 per bushel.

Oats.—Heavy to light—ranging as to character from 76 a79c. per bushel—bulk.

Corn.—White, $1.12a$1.15; Yellow, $1.13a$1.16 per bushel.

HAY AND STRAW.—Timothy $33a35, and Rye Straw —— per ton.

POTATOES.—90a95 cents per bushel.

PROVISIONS.—*Bacon.*—Shoulders, 10a10¼ cts.; Sides, 12a12¾; Hams, plain bagged, 15a16 cts.; sugar cured, 16a 16½ cts. per lb.

SALT.—Liverpool Ground Alum, $2.20a2.25; Fine, $3.20; Turk's Island, 62a65c. per bushel.

SEEDS.—Clover and Timothy nominal—out of season. Flaxseed, $3.00 per bushel.

TOBACCO.—We give the range of prices as follows:

Maryland.	
Frosted to common	$1.50a 3.00
Sound common	3.50a 4.00
Middling	6.00a 8.00
Good to fine brown	10.00a15.00
Fancy	17.00a25 00
Upper country	3.00a30.00
Ground leaves, new	3.00a5.00
Ohio.	
Inferior to good common	3.00a 6.00
Brown and spangled	6.00a12.00
Medium to fine red and spangled	8.00a20.00
Fine yellow and fancy	20.00a30.00

WHISKEY—34a35 cts. per gallon, in barrels, in bond.

WOOL.—We quote: Unwashed, 26a29 cts. per lb.; Tub-washed, 45a48 cents; Fleece, 40a50 cents; Pulled, No. 1, 34a38 cts.; Merino, 40a43 cts.

CATTLE MARKET.—Common, $6.00a$7.75; Good, $8.00a $8.75; Prime Beeves, $10.00a10.25 per 100 lbs.

Sheep—6¾a7¼ cents per lb. gross.

Hogs—$10.00a10.75 per 100 lbs., net.

Wholesale Produce Market.

Prepared for the American Farmer by HEWES & WARNER, *Produce and Commission Merchants, 67 Exchange Place.*

BALTIMORE, May 22, 1867.

BUTTER.—Ohio Grass Roll, 25 to 30 c.; in tubs, 20 to 26; new Glades, 25 to 32; new Goshen, 30 to 33.

BEESWAX—35a38 cts.

CHEESE.—Eastern, 19a20; Western, none here.

DRIED FRUIT.—Apples, 7 to 8; Peaches, 10 to 12.

EGGS—15a17 cents per dozen.

FEATHERS.—Live Geese, 70 to 85 cents.

LARD.—Western, 13a13¾; City rendered, 15 cts.

TALLOW.—10a11 cents.

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